

# The Greek Economy

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The Foundation for Economic and Industrial Research (IOBE) is a private, non-profit, public benefit research organisation. Its purpose is to promote research on current problems and prospects of the Greek Economy and its sectors and to generate reliable information, analysis and proposals for action that can be of value to policy makers.

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## Foreword

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IOBE is publishing its first report for 2023, as part of the periodic reviews of the Greek economy. It contains four sections, accompanied by an annex of structural indicators, comparing the performance of Greece with that of the remaining countries in the Euro area. It is preceded by an introductory text highlighting the positive momentum of the economy, the inherent challenges, and the pressures from the international environment. The remaining sections include the following:

The first section contains a brief overview of the report, setting out its highlights, analysed in detail in the following sections. The second section outlines the broader economic environment and includes: a) analysis of the international environment in the fourth quarter of 2022 and the outlook for 2023, b) presentation of the economic climate in Greece in the first quarter 2023, according to the results of the business and consumer surveys of IOBE, c) assessment of the balance of the State Budget for January-February this year and d) developments in the domestic financial system up until February 2023.

The third section focuses on the performance of the Greek economy. It outlines the macroeconomic environment with an emphasis on the fourth quarter of 2022 and presents the forecasts for 2023, based on assumptions and taking into account the latest available data. It analyses developments in key production sectors in the fourth quarter of last year and presents the export performance of the Greek economy for the same period, based on data from both the national accounts and the balance of payments. After that, it outlines developments in the labour market over the fourth quarter of last year. It then analyses the inflation trends in the first two months of 2023.

The fourth section presents the main findings from a recent IOBE study on the medium-term growth prospects and financing needs of the construction sector. The current report contains four text boxes. The first presents the evolution of the Greek government's credit assessment compared to other countries that have completed adjustment programmes (section 2.2.C). The second describes the evolution of Greece's open economy indicator relative to the European trend (Section 3.1.A). The third highlights qualitative data on the 2022 trade deficit through the mix of imports and exports (Section 3.3.B). The fourth shows recent trends over time among minimum-wage earners in Greece (section 3.4).

This report refers to and is based on data available until 4/4/2023.

IOBE's next quarterly report on the Greek economy will be published in July 2023.



# POSITIVE ECONOMIC MOMENTUM, INHERENT CHALLENGES, AND PRESSURES FROM THE GLOBAL ENVIRONMENT

Last year, the Greek economy recorded a very strong growth momentum, for the second consecutive year, ending the major recession that had preceded due to the pandemic. For the current year, a significant slowdown in the growth rate of the economy, as in the rest of Europe, is expected. There are also distinct risks. In the international environment, in addition to the slowdown, inflation is causing a further sharp rise in interest rates. In the domestic economy, some of its growth drivers are being exhausted or reversed, such as expansionary fiscal policy and a strong recovery in consumption following the lifting of the pandemic restrictions. Therefore, in order to maintain a continued momentum of strong growth, it is necessary to strengthen investment and implement reform interventions that mainly strengthen the supply side of the economy.

There are several factors that support the current growth of the Greek economy. Some of them are of particular importance and interest.

First, the strong recovery in consumption, which has also been strengthened by household support measures, yet it mainly reflects an accumulated response following the lifting of the pandemic restrictions. In addition to the deferred consumption and the savings that were then triggered, it appears that, at least temporarily, the propensity to consume of a significant part of the households has increased.

Second, there are similar trends in other economies, mainly in Europe, and as a result, the strong dynamics of incoming tourism from last year seem to carry over to this year.

Thirdly, the activation of the Recovery and Resilience Facility and related European schemes favours the economy both directly by channelling liquidity into various sectors, with relatively favourable financing conditions, and indirectly through reforms set as conditionalities, but above all by consolidating stability conditions for investment more broadly. In this regard,

What is underpinning the current growth?

there is also an increase in credit growth in the economy, despite the rise in nominal interest rates.

Fourth, most of Greece's public debt is not affected by rising interest rates in the global environment, as it is longer-term and with fixed interest rates. As a result, the negative impact of a sharp shift in monetary policy is not as large as it would otherwise have been for an economy with such high public debt. On the contrary, in the short term, high inflation creates leeway for the treasury and reduces the nominal impact of debt, without ignoring its corrosive effect on the economy over the medium term.

There are also trends that may be important to sustain the dynamic growth of the economy over the medium term.

Critical medium-term trends

The first relates to the gradual increase in exports of goods in recent years, which concerns a significant range of industries and export destinations. Although the distance separating Greece from other economies with similar characteristics remains very large, and while significant pressures are expected due to the slowdown of economies abroad and the remaining high energy costs, the strengthening of openness especially through the competitiveness of manufacturing is a significant positive development.

The second trend concerns the overall extent to which the Greek economy is open, as defined by the sum of exports and imports as a percentage of the gross domestic product, which is growing. Despite the large and alarming increase in imports, overall a more open economy is more dynamic as it easier integrates innovation and new technologies and leads to higher competitiveness.

The factors mentioned above are among those that have supported the strong growth of the economy over the past two years. However, in the short term, there are significant challenges for the economy that come from both the international environment and its structural features. After all, the growth of the economy has been accompanied by a return to twin deficits, fiscal and external, the balancing of which is important to take place sooner rather than later.

The biggest change stems from a sharp shift in the global economy, where a long period of central banks channelling extensive liquidity into the economy, resulting in an extremely low cost of money, has been superseded by a strong concern about high and persistent inflation and a sharp and ongoing rise in interest rates. The recent collapse of three US banks and turmoil in Switzerland's second-largest bank raised concern. Nothing can be ruled out in such a volatile global economy, but it is unlikely that this crisis will spread to a large number of other institutions. In particular, for banks in the euro area, and the Greek ones, a strict supervisory system for their capital adequacy and operation has been implemented in recent years. Those dealing with economic policy aspects in governments, central banks, and international organisations are much more conservative and are trying to avoid crisis areas, having understood already from 2008 how quickly a flare-up can expand.

External pressures and inherent challenges



However, although the immediate likelihood of an acute crisis is small, there are risks and significant challenges. The problems in the world economy are deep. Policy moves to deal with previous crises, mainly through the channelling of extensive liquidity, have led to a partial delay of the problem but not to a solution. The need for a large increase in central bank interest rates due to inflation reduces the growth rates of the economies and creates a problem of refinancing for households, firms, and states. Of course, it cannot be forgotten that the energy crisis, especially in Europe, has not ended its cycle nor that the war continues after the Russian invasion of Ukraine, which still is a source of uncertainty for the economy.

In the coming period, those who have been exposed to high-level borrowing may face pressure if they are organically weak. In the previous period, these problems were concealed by broad liquidity and thus weak firms could continue to operate. In the new environment, money is more expensive and more selective. For our economy, this means that the profitability of businesses will generally decrease, while their borrowing costs will increase. The public treasury does not have the same potential for subsidies as before, and its borrowing costs are also expected to increase.

Given the strong pressures from the global economy and in particular from the European environment, and as the positive impact that some factors have recently had on growth is inevitably weakening, while the country is in a pre-election period, to properly target three key areas of economic policy is a prerequisite for the consolidation of growth dynamics.

First, even if a shift to primary surpluses were already necessary, it is now all the more urgent to pursue a policy that promotes the soundness of fiscal finances, coupled with reaching the investment grade as soon as possible. Already from the current year, it is important to have a net primary surplus that is sustainable, so that the country does not derail to a high-risk category with an impact on its growth prospects. Balancing the accounts so that there are surpluses requires the economy to wean itself from the large benefits made necessary by the pandemic and the intense energy crisis. These should be replaced from now on by labour support measures, a rise in real incomes, and appropriate targeting with measures to support only truly vulnerable households. At the same time, lowering the spread of the financing cost compared to other European economies can neutralise, in part, the international rise in interest rates for domestic households and firms.

Key economic policy priorities

Second, as the global framework no longer favours investment and exports, infrastructure and reform efforts, including through the recovery fund, must be strengthened, which will boost the country's competitive position. Despite the progress achieved in recent years, the gaps in the level of exports as a whole and investment in the country remain large. In this respect, the stability of economic policy is of particular importance so that companies wishing to invest in new production capacity in the long term are not exposed to excessive uncertainty. The grid of necessary interventions extends from the public sector for the justice system to education and training, in view of the need to maintain and attract people in the country.

Finally, the handling of inflation is of particular importance, on the one hand, in order not to harm the relative competitive position of the country with the ultimate effect of lowering incomes, and on the other, so that there is no continued strong pressure on households, especially those in a weak economic position. Among other things, strengthening the production base and competition in the market is especially critical, in particular by facilitating investment and new firm entry. At the same time, the fact that an important part of the economy remains informal, on the one hand, maintains undeclared incomes that increase demand to a level that other households cannot follow, and on the other creates unequal conditions of competition in the market among firms. The intensity of measures to shift from the informal to the formal economy is a prerequisite for its overall development thereafter.



# 1 BRIEF OVERVIEW

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## **International environment: Disinflation, moderate economic activity uptick**

Based on the latest OECD forecasts (March 2023), the global economy is projected to grow higher in 2023 by 2.6% compared to the November forecast (2.2%). Inflation is easing gradually, under the influence of lower international energy prices, yet it remains at high levels, especially for basic necessities and food. Indicatively, in the 38 OECD countries, inflation fell to 8.8%, gradually declining from the 10.7% record high of October 2022, while core inflation rose to 7.3%. Maintaining inflation at high levels and a strong labour market in many countries increase the likelihood that the cost of money will remain high worldwide for longer. While the possibility of a smooth landing of the economies remains likely, continued interventions and higher interest rates for longer durations maintain the risk of a sharper fall in economic activity. A more extensive analysis is presented in section 2.1A.

## **European economy: Weak recovery in 2023**

In an environment of high uncertainty, Europe's economies are expected to experience weak growth in 2023, with inflation significantly above the target and an expectation of a further tighter monetary policy. Russia's invasion of Ukraine, its high-intensity and lasting economic effects, and the energy crisis with the possibility of a re-escalation in late 2023 highlight the need for multilateral interventions for energy security and demand support. Increased volatility due to recent turbulence in banking markets poses a risk to the smooth recovery of the European economy and the stability of the financial system. Appropriate coordination of fiscal and monetary policies at the collective and national levels is also central in order to strike a balance between the objective of containing inflation expectations and avoiding an economic downturn. The public consultation on the revision of the EU fiscal rules framework in 2024 presents an opportunity to deepen the monetary union through the new crisis.

The annual rate of change in real GDP in the euro area in the fourth quarter of 2022 declined to 1.9% from 2.3% in the previous quarter. The economic climate deteriorated further in Europe in early 2023. The ECB has already carried out six rounds of hiking key interest rates since mid-2022, cumulatively by 350 basis points, with obvious implications for the cost of private and public sector financing. The trends in the European economy are detailed in section 2.1B.

## **Stronger than anticipated recovery in Greece in the fourth quarter of 2022, strong last year as a whole**



Economic growth accelerated to 5.2% in the fourth quarter of 2022 (compared with 4.4% in the previous quarter), with investment and private consumption as key drivers. Economic growth in late 2022 was hampered by the expansion of the annual growth rate of imports (+7.5%), coupled with a decline in exports (-3.5%) for the second consecutive quarter. Following the resurgence of the Greek economy in the fourth quarter of last year, the annual growth rate is estimated at 6.1% for 2022. Last year's strong growth was mainly driven by private consumption (+7.9%) and investment (+21.8%). Negative developments for 2022 include the widening current account deficit (-9.7% as a percentage of GDP), with imports (+10.9%) increasing by almost twice as much as exports (+4.9%). The degree of openness of the Greek economy stood at a record level of 82% in 2022 (Text Box 3.1). A detailed presentation of the macroeconomic performance in the third quarter of this year is included in section 3.1A.

### **Mild positive trends in key sectors of domestic activity, with a slowdown in the first quarter**

Industrial production strengthened throughout 2022, with an average of 2.2%, compared to a growth rate of 10.1% in 2021. There was a slowdown during 2022 and a temporary decline in the fourth quarter, with a marginal increase in early 2023. Construction recorded strong output growth of 23.0% in 2022, up from 7.3% in 2021. Retail trade increased in volume by 3.3% in 2022 as a whole, from an increase of 10.2% in 2021. Following a marginal decline in late 2022, annual growth remains mildly positive in early 2023. The tourist activity indicators recorded an impressive increase in 2022, by 54.9%. In addition, twelve of the thirteen sub-branches of Services show an improvement in turnover in 2022. Short-term trends in key sectors of the Greek economy are highlighted in section 3.2.

### **Large deficit of the external balance**

Exports in the national accounts increased strongly in nominal terms in 2022 as a whole, at a rate of 36.8%. Milder, yet still strong growth was recorded in exports excluding petroleum products (+20.0%). There is a rise in nominal terms in all product categories, with the largest increase in fuel exports and industrial products. On the import side, the increase in current prices was higher than that of exports, at a rate of 42.3% in 2022 as a whole. As a result, the trade deficit widened significantly compared with 2021 by 51.1%, to EUR 38.4 billion. On the positive side, the Greek economy continued to post high openness in 2022, as the sum of exports and imports, as a percentage of GDP, exceeded 82% at constant prices and 107% in current prices, the difference coming from high trade flow deflators relative to the GDP deflator.

On the balance of payments side, for 2022 as a whole, there was a significant increase in the current account deficit to EUR 20.1 billion (9.7% of GDP), compared with EUR 12.3 billion (6.8% of GDP) in 2021, with all accounts deteriorating except services. Text box 3.3 highlights qualitative data on the 2022 trade deficit through the mix of imports and exports. A significant correction of the deficit in the current account took place in January 2023, due to an improvement in the goods account and the secondary income account. The developments in the external balance are described in more detail in Section 3.3.

### **Slowdown of the reduction of unemployment**

The strongest fall in unemployment since 2014, by 2.3 percentage points, from 14.7% to 12.4%, was recorded in 2022 as a whole. The entry-exit balance in the private sector was positive by 72,900 in 2022 but lower than the positive balance of 2021 (+133,100). The sectors with the highest growth in employment were Tourism (+52,200 employed), Education (+ 32,300), Manufacturing (+22,900) and Wholesale-Retail trade (+19,900). The seasonally adjusted wage cost index increased annually in 2022 by 1.5%.

Employment is expected to be impacted more mildly by investment growth, the use of the resources of the recovery fund, and weaker consumption and export growth. These factors are expected to partially



offset the negative impact of rising interest rates on firms' demand for labour. A further reduction in unemployment is expected in the coming quarters, with a clear slowdown trend. In view of the above effects, the unemployment rate is expected to vary in the region of 11.0% for 2023. The special text box 3.4 presents recent trends over time among minimum wage earners in Greece. More details on the developments and expectations for the labour market trend are included in Section 3.4.

### **Gradual decline in inflationary pressures, high food inflation**

Inflation declined systematically in early 2023, with an average growth rate of 5.9% in the first quarter of the year, compared with 9.6% in 2022 as a whole. Inflation in the first two months of 2023 was below the EA average, while in 2022 it was higher on average (Appendix). While international energy commodity prices declined further in early 2023, commodity and food prices continued to rise strongly. Indicatively, the rate of change in the HICP with fixed taxes and excluding energy stood at 8.2% in the first two months of 2023, up from just 2.7% a year ago.

Key assumptions for the inflation forecast are: (i) the evolution of the price of Brent oil, valued in euro, which is expected to decline annually by around 20% in 2023, (ii) the development of aggregate consumer demand, which is expected to increase much more moderately, by around 1.2%. For 2023 as a whole, the Consumer Price Index is projected to increase by about 4.3%. Section 3.5 describes in more detail recent trends in consumer and producer prices, as well as expectations for their evolution in 2023.

### **Domestic economic sentiment moved up mildly in the first quarter, albeit remaining lower than a year ago**

The economic sentiment indicator in Greece recorded a significant increase in the first quarter of 2023 compared to the immediately preceding quarter (106.8 against 101.5 points). The decline compared to the same quarter of last year is limited (112.8 points). Business confidence strengthened significantly in the recent quarter compared to the previous one in Industry and Construction, and to a lesser degree in Retail trade, while it declined mildly in Services. The consumer confidence indicator improved significantly in January-March compared with the previous quarter, to -43.3 (from -52.6 points). At the same time, it reached similar levels as those recorded a year earlier (-43.6 points). A detailed description of trends in the components of the economic sentiment can be found in Section 2.2A.

### **Public finances better than targets, due to higher revenue**

The implementation of the budget moved better in cash terms than the 2022 target. Government revenues exceeded the target (+8.6%) due to stronger economic activity and inflation. On a cash basis, the State Budget recorded a deficit of EUR 11.656 million (5.5% of GDP) and a primary surplus of EUR 2,308 million (1.0% of GDP). Government debt moved further down as a percentage of GDP in 2022, to 178.2% in the third quarter (Appendix). In the first two months of 2023, the overperformance of public finances in cash terms continued, with a government budget surplus of EUR 2,308 million (1.0% of GDP) and a primary surplus of EUR 4,215 million (1.9% of GDP). Recent trends in public finances are presented in Section 2.2B.

### **Higher financing costs, international bank turbulence**

In the first quarter of 2023, the European Central Bank continued to raise key interest rates to ease inflationary pressures. The domestic banking system demonstrated resilience to the turbulence of the international banking system in the United States and Switzerland in March. The use of liquidity-supply tools by the Eurosystem to Greek banks decreased markedly in early 2023. The timely implementation of the loan arm of the National Recovery and Resilience Plan, as well as the new REPowerEU tool, boosts the outlook for credit growth and investment in 2023 and in the medium term.



Among the positive trends in banks' fundamentals, credit to corporates continued to grow, while the non-performing loans (NPLs) on banks' balance sheets continued to decline, to 8.7% of total loans at the end of 2022, for the first time since mid-2009. At the same time, the implementation of the loan arm of the National Recovery and Resilience Plan is ongoing, while an application for the loan strand of the REPowerEU programme has been submitted, creating opportunities to further stimulate credit for productive investments. The cost of new borrowing by the Greek government remained slightly above 4% in early 2023, while the "investment grade" loss reaches a total of 13 years, 5 years since the end of the adjustment programmes, with an expectation of its recovery later this year (Text box 2.2).

Among the negative trends in early 2023, the rise in the cost of new private sector borrowing accelerated, the trend in private deposits turned negative, while the credit contraction to households continued unabated. Priorities for the banking system are the continued improvement in asset quality and equity, as well as the effective implementation of the bankruptcy code and the out-of-court debt settlement mechanism. Recent trends and challenges for the domestic financial system are described in detail in Section 2.2C.

### Macroeconomic forecast for 2023

The growth slowdown in the euro area, the slow de-escalation of inflation, the fiscal aggregates, the execution of the "Greece 2.0" plan, the election period, and the granting of an investment grade, will be the major drivers of GDP developments in 2023.

The base scenario assumptions are detailed in Section 3.1B, while they include (a) weak growth in the euro area of 1.0% in 2023, in line with the ECB's baseline scenario (b) no further exacerbation of geopolitical instability, (c) acquisition of investment grade in the second half of 2023, (d) a slight delay in the implementation of the Greek plan "Greece 2.0", (e) slightly higher public expenditure compared to the 2023 Budget and (f) tourism revenue performance similar to 2019.

Detailed projections by GDP component are described in Section 3.1B. In particular, IOBE is revising upwards the estimate for a recovery in 2023, to 2.4%, at constant prices, due to expected stronger investment growth and more resilient consumption. In terms of growth components in 2023, fixed capital investment is expected to make the highest contribution, with an annual expansion of 10.0%, while consumption is expected to increase by 1.2% due to resilient private consumption. A small improvement in the external balance is also expected, with exports and imports increasing annually in 2023 by 3.2% and 2.6% respectively. Average inflation for 2023 is expected to be slightly milder than the euro area average in the 4.3% region, while unemployment is projected to de-escalate further, but at a slower pace, to about 11%.

The forecast in IOBE's baseline macroeconomic forecast scenario (Table 1.1) entails positive prospects and risks for 2023, which are detailed in section 3.1B.

**Table 1.1**

IOBE macroeconomic forecasts (January 2023) for 2022-2023

(in constant market changes, unless	2022 (actual)	2023	prices, annual % indicated otherwise)
GDP	6.1%	2.4%	
Consumption	5.6%	1.2%	
Private consumption	7.9%	1.3%	
Public consumption	-1.5%	0.0%	
Gross capital formation	21.8%	7.1%	
Gross fixed capital formation	11.6%	10.0%	
Exports	4.9%	3.2%	
Imports	10.9%	2.6%	



Inflation rate	9.6%	4.3%
Unemployment (% labour force)	12.4%	11.0%

### **Special study: Growth prospects and financing needs in the construction sector**

The study carried out by IOBE presents key figures of the construction sector, as well as the planning of infrastructure and other construction projects to be financed by national and EU funds in the coming years. The relevant investment expenditure for the period 2021-2026 is derived based on available financing data. The outlook for the construction sector is, under certain conditions, positive. The expected rise in construction activity will strengthen the funding needs of businesses and professionals in the sector in the coming years. The difficulties in financing and the high funding gap may be alleviated by the use of various financial instruments (e.g. guarantee funds, interest rate subsidies, etc.) in order to reduce, respectively, severe disruptions to business activity and investment levels and to implement seamlessly public and private investment in construction projects in the coming years.







## 2 ECONOMIC ENVIRONMENT

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### 2.1 Trends and Prospects of the Global Economy

#### A. The Global Environment

- Based on the latest March OECD forecasts for 2023, the global economy is projected to grow faster than the November forecast (2.6% from 2.2%).
- Inflation is gradually declining, yet it is still at high levels.
- The global restrictive monetary policy is projected to be maintained for a longer period, which increases the chances of a hard 'landing' of economic activity.

The global economy slowed significantly in 2022, recording a growth rate of 3.2%, as a result of Russia's invasion of Ukraine, falling real incomes, and a slowdown in China's economy. The OECD economies grew at an annual rate of 1.4% in the fourth quarter of 2022, after GDP growth of 2.6% in the previous quarter and growth of 5.3% in the corresponding quarter of 2021. The annual rate of change of GDP in the major developed economies (G7) stood at 0.9%, compared with 1.9% in the previous quarter and growth of 4.8% in the corresponding quarter of 2021. OECD's 20 largest economies grew at a rate of 2.2% in the fourth quarter of 2022, down from 3.4% in the previous quarter, after growth of 4.7% in the corresponding quarter of 2021.

Headline inflation is declining, but core inflation remains high due to strong pressures on the prices of services, strong profit margins in some sectors, and low unemployment. Inflation in the 38 OECD countries last February reached 8.8%, gradually declining from the 10.7% high recorded in October 2022. Core inflation (excluding energy and food) remains high at 7.3%, while energy and food prices rose by 11.9% and 14.9%, respectively.

The maintenance of inflation at high levels and a strong labour market in many countries have resulted in further monetary policy tightening measures and an intention to keep interest rates high by global central banks for longer. The tightening of financial conditions has already started to negatively affect both inflation and economic activity, and some risks to financial stability are becoming visible. While the soft landing of the economies remains likely, ongoing interventions and keeping interest rates high for longer periods increase the risk of a sharper fall in economic activity.



**Table 2.1**

Global Environment (annual % GDP growth, in real terms, unless stated otherwise)

Economy	2022		2023		2024	
	Estimate*	Forecast	Difference from previous forecast*	Forecast	Difference from previous forecast*	
World	3.2	2.6	0.4	2.9	0.2	
USA	2.1	1.5	1.0	0.9	-0.1	
Japan	1.0	1.4	-0.4	1.1	0.2	
Canada	3.4	1.1	0.1	1.4	0.1	
United Kingdom	4.0	-0.2	0.2	0.9	0.7	
Eurozone	3.5	0.8	0.3	1.5	0.1	
<i>Germany</i>	1.9	0.3	0.6	1.7	0.2	
<i>France</i>	2.6	0.7	0.1	1.3	0.1	
<i>Italy</i>	3.8	0.6	0.4	1.0	0.0	
Turkey	5.6	2.8	-0.2	3.8	0.4	
China	3.0	5.3	0.7	4.9	0.8	
India	6.9	5.9	0.2	7.1	0.2	
Brazil	3.0	1.0	-0.2	1.1	-0.3	
World trade	5.4	2.9	-	3.8	-	

\* Actual values or preliminary estimates are provided, if available.

\*\* Difference in percentage points from previous OECD forecasts (OECD Economic Outlook, November 2022)

Source: OECD Economic Outlook, Interim Report, March 2023

Global GDP growth over the past year is estimated at 3.2%, while for 2023 growth of 2.6% is projected in the recent OECD report, up from 2.2% projected in last November’s report. World trade volume growth is forecast at 2.9% for 2023 from 5.4% in 2022, while for 2024 it is projected to strengthen to 3.8%. Table 2.1 shows the annual changes in GDP in 2021 and the latest OECD forecasts (March 2023) for its annual changes in 2023 and 2024, in the world economy and in selected developed and developing countries.

Next, we analyse recent and expected trends in the economies of major states and associations of states for 2023 and 2024.

Among the major developed countries, the United States recorded an annual growth rate of 0.9% in the fourth quarter of 2022, down from 1.9% in the previous quarter and 5.7% in the corresponding quarter of 2021. On a seasonally adjusted basis, the fourth quarter saw growth compared with the previous quarter (an annualised rate of 2.6%), owing to an increase in inventories and consumer expenditure, partly offset by a decline in investment in housing. Inflation slowed to 6.5% last February, falling for the eighth consecutive month from a 40-year high recorded in June 2022 (9.1%). In order to control inflationary pressures, the Fed has proceeded to successive hikes in its base rate, raising the total by 500 basis points between March 2022 and December 2022, to 4.75%-5.00%, and is expected to reach up to 5.00%-5.25% by mid-year. In 2022 as a whole, the US economy grew at 2.1%, while for the current and next year growth is forecast at 2.6% and 2.9% respectively.

The euro area economy grew by 1.8% in the fourth quarter of 2022, down from 2.4% in the previous quarter and against 4.8% in the same quarter of 2021. Compared with the third quarter, economic activity remained unchanged on a seasonally adjusted basis, with household consumption declining 0.9% and gross fixed capital formation falling by 3.6%, as stubbornly high inflation, rising borrowing costs, and supply chain bottlenecks hit activity and demand. Meanwhile, government spending increased by 0.7% and net foreign demand contributed positively to GDP as exports rose 0.1% and imports were 1.9% lower. Inflation fell to 6.9% last March in the euro area, its lowest since February 2022, but core inflation recorded a new historical high of 5.7%. The ECB has made six successive 350 basis points increases in its base rate between July 2022 and last March, to 3%. Further hikes are expected by the middle of this year, due to the persistent inflation, which is projected to fall to 5.3% in



2023 and 2.9% in 2024. For 2022 as a whole, the euro area economy grew at a rate of 3.5%, while marginal growth is forecast for 2023 at 0.8%, accelerating to 1.5% in 2024.

In the United Kingdom, GDP rose by 0.4% in the fourth quarter of last year, from an increase of 1.9% in the previous quarter and growth of 8.9% a year earlier. Overall, growth of 4% was recorded in 2022 while 0.2% contraction is projected for this year, and marginal growth is projected for the following year (0.2%).

In Japan, GDP grew by 0.4% in the fourth quarter of 2022, after an increase of 1.5% in the previous quarter and an increase of 1.4% a year earlier. For 2023, the Japanese economy is projected to grow at 1.4%, up from 1% in 2022, while for 2024 growth is forecast at 1.1%.

Next in the current subsection, we present recent trends and economic policy challenges in four developing countries and economic regions, which generate almost a third of global GDP.

China's economy accelerated its growth rate in the fourth quarter of 2022, to 2.9%, from 3.9% in the previous quarter and 4.3% a year earlier. Overall, for 2022, growth was 3% below the target set by the government, marking one of the worst performances in the past 50 years. The extensive lockdowns due to the zero-COVID policy had a strong negative impact on both industrial activity and domestic demand. Growth of 5.3% is projected for this year, easing to 4.9% in 2024.

India's economy recorded 4.2% growth in the fourth quarter of 2022, from 5.5% growth in the previous quarter and 4.4% growth a year ago. Overall for 2022, growth reached 6.9%. For 2023 growth is forecast at 5.9%, accelerating to 7.1% in 2024.

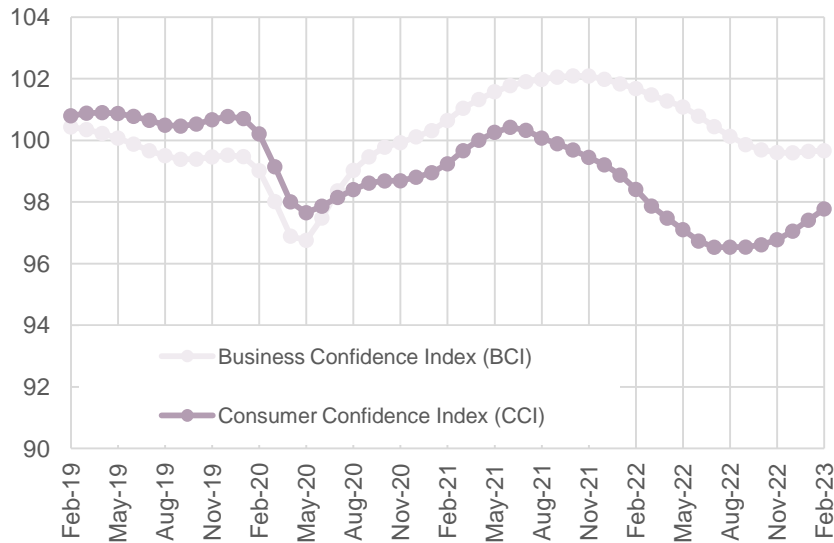
Türkiye's economy recorded a growth rate of 4.5% year-on-year in the fourth quarter of 2022, up from 4.1% in the previous quarter, compared with 9.2% growth a year ago. The annual inflation rate declined for the fifth consecutive month to 50.5% last March, while the exchange rate of the Turkish lira depreciated at a slower pace (annual growth of 31.4% and 31.2% of the dollar and the euro respectively, against the Turkish lira). The country's central bank proceeded to successive reductions in its key interest rate by 550 basis points between August and March 2023, to 8.5%. For 2023, the Turkish economy is projected to grow at a rate of 2.8%, strengthening to 3.8% in 2024.

Among Latin American countries, Brazil's economy grew by 2.3% in the fourth quarter of 2022, down from 3.6% in the previous quarter and 2.1% in the corresponding quarter of 2021. GDP is projected to grow by 1.0% in 2023 and 1.1% in 2024.

The OECD's business confidence index steadied at levels marginally below its long-term average, while the consumer confidence index continued to improve for the sixth month in a row, yet it remained below its long-term average (Figure 2.1).

**Figure 2.1**

Economic sentiment indicators for the OECD countries  
(seasonally adjusted data, long-term average = 100)



The global consumer confidence index is strengthening, while the business confidence index is improving slightly.

Source: OECD

## B. EU and Euro area economies

- Positive annual growth in real GDP in the EU and the euro area in the fourth quarter of 2022, by 1.8% and 1.9% respectively.
- Improved growth and inflation outlook for 2023 according to the EU interim economic forecast.
- Heightened uncertainty due to fluctuations in financial markets
- End of the ECB's expansionary monetary policy that lasted for almost 12 years, with a gradual but also systematic increase in key interest rates.
- Croatia's accession to the euro area from January 2023.

The pandemic and then the war in Ukraine brought many significant economic effects worldwide. For Europe, the impact is mainly related to its energy dependency on Russia. Before the outbreak of the war, a tendency to return to normality had begun to be felt, with the gradual lifting of various restrictive measures in many countries. The projections for the EU economy before the outbreak of the war pointed to the start of a strong expansion phase, notably through the implementation of the recovery fund. In terms of economic policy, one-off monetary and fiscal measures introduced in response to the pandemic were expected to be phased out.

Two of the main problems to be addressed are the energy crisis and the rapid rise in inflation. On the energy side, the European gas reference price has fallen below its pre-war level, aided by a sharp drop in gas consumption and continued diversification of supply sources. At the same time, excessively large increases in energy and food prices, demand-side pressures stemming from the relaunch of the economy after the expiry of the containment measures, and supply rigidities contribute to a sustained rise in inflation. An important event, which is not taken into account in the February forecasts, is the recent turbulence in the financial system. According to the European Central Bank's monetary policy decision published on 16 March, inflation is expected to average 5.3% in 2023, 2.9% in 2024, and 2.1% in 2025. As current inflation factors weaken over time and monetary policy interventions are passed on to the economy and to the price level, inflation is expected to ease.

The Eurozone, with Croatia's accession in January 2023, now consists of 20 states. On 12 July 2022, the Council of the European Union formally approved Croatia's accession to the euro area, strengthening the position of the European monetary union in international markets.



Looking at the trend in economic activity in the fourth quarter of 2022 in the European Union and the euro area, growth slowed from the previous quarter to 1.8% and 1.9%, from 2.5% and 2.3% respectively, against a recovery of 5.1% and 4.8% in the EU and EA respectively one year earlier. According to the European Commission's recent forecast,<sup>1</sup> growth in the euro area is estimated at 3.5% for 2022, while a lower growth rate of 0.9% is projected for 2023. Similarly, for the European Union growth is estimated at 3.5% in 2022 and 0.8% for the current year.

Growth in the economies of the European Union in the period from October to December 2022 was driven by stronger domestic demand, with investment contributing 0.4% of GDP, more than in the previous quarter (2.4%). The contribution of consumption was 0.5%, compared with a higher contribution in the third quarter of 2022, 1.1 pp. of GDP. The impact of net exports on GDP change in the fourth quarter of 2022 was positive, by 0.9%, from negative in the previous quarter (-1.0%). The trends in the structure of growth in the euro area economies are similar, with domestic demand being the key growth factor (1.0 pp. from 3.6 pp. in the third quarter of last year). There was also a marginal contribution of investment compared to the fourth quarter of the previous year (0.3% of GDP), of a lower intensity than in the previous quarter (2.4% of GDP), while consumption had a positive impact of 0.6 pp., from a higher impact in the third quarter of 1.2 pp. In addition, in that quarter, the contribution of net exports to the euro area was positive by 0.9%, while a quarter earlier it was negative (-1.3%).

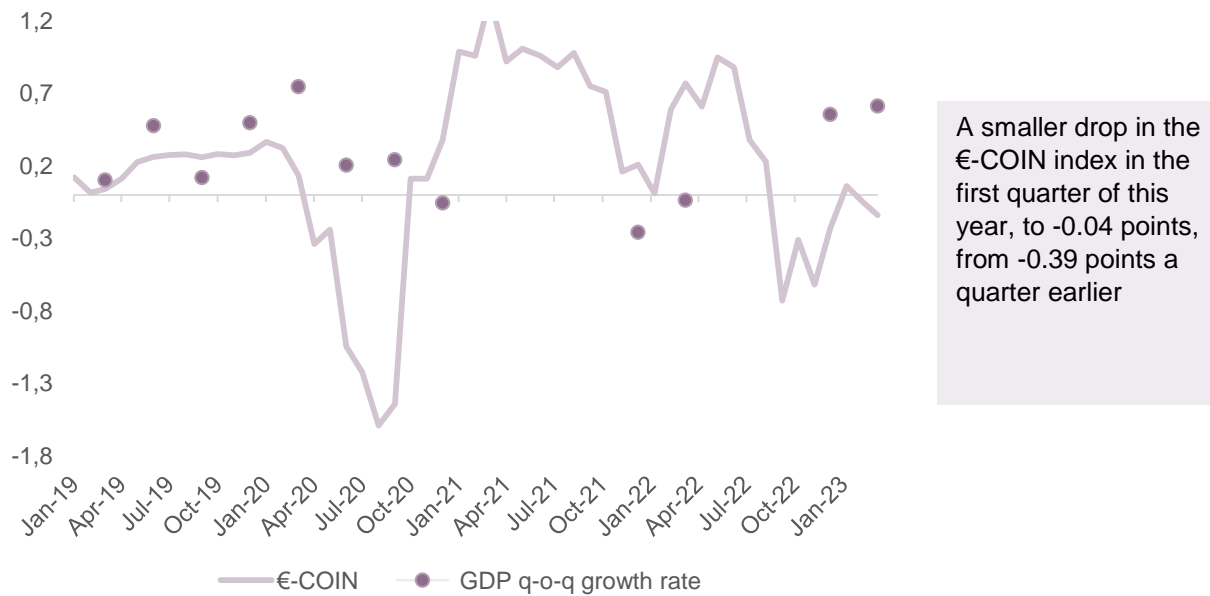
The composition of GDP components on the expenditure side remains similar in the EU-27 and the euro area, with private consumption accounting for 52.3% of GDP in both groups, investment accounting for 23.1% and 22.6% of GDP, exports for 54.7% and 53.3% of GDP, and imports for 51.4% and 49.7% of GDP.

The strongest growth (annual changes in seasonally adjusted data) among the EU countries in the fourth quarter of the year was recorded in Ireland, where the rate reached 13.1%. Next came Greece (5.2%), Romania (4.9%), and Malta (4.7%). The countries experiencing recession included Estonia (4.4%), Luxembourg (2.2%), and Lithuania (0.4%). In terms of the 12-month rolling average, Greece had a positive growth rate of 6.1%, well above the average rate in both the EU and EA (3.6% and 3.5%). The only country experiencing annual recession was Estonia (1.0%), while the lowest 12-month growth occurred in Luxembourg (1.6%), followed by Slovakia (1.7%). By contrast, the country with the highest positive rolling growth rate in the EU was Ireland (12.2%) followed by Malta (6.9%) and Croatia (6.4%).

### Figure 2.2

#### Monthly €-COIN Index & Eurozone GDP\*

<sup>1</sup> European Economic Forecasts Winter 2023, European Commission, February 2023



\* The Research Centre of Economic Policy Research in collaboration with the Bank of Italy estimates every month the leading indicator of economic activity €-COIN for the Eurozone. The indicator is a forecast of quarterly GDP growth and is derived from the synthesis of a variety of different data, such as the evolution of industrial production, prices, labour market data, as well as financial data. Source: CEPR and Bank of Italy.

In terms of trends in economic sentiment and key leading indicators of economic activity in the euro area and the European Union, the €-COIN indicator declined marginally in the first quarter of this year to -0.04 points (Figure 2.2). In March 2023 in particular, the index was negative at -0.14 points, from 0.77 in March 2022, indicating expectations of a decline in GDP.

The European Commission’s economic sentiment indicator in the EU-27 and the euro area improved in January-March this year compared with the previous quarter, by 3.4 and 4.2 points respectively, while year on year, it fell by 12.9 and 11.6 points. As a result, the index reached 97.6 and 99.5 points. In March this year, the economic sentiment indicator stood at 97.4 points in the EU-27 and 99.3 points in the euro area, down from the previous month. Meanwhile, it stood 8.3 and 6.8 points lower than a year ago in the EU-27 and EA respectively (Table 2.2).

Among the EU’s largest economies, in France the index increased in the first quarter of this year from the previous quarter (2.8 points), while compared with the first quarter of 2021 it stood 11.5 points lower. An increase from the fourth quarter of the previous year was observed in Germany, by 4.6 points, while it decreased compared with the first quarter of last year (13.2 points). In Italy, the index increased by 4.5 points compared with the previous quarter and decreased by 4.9 points compared with the same quarter of the previous year. Finally, between January and March 2023, Greece’s economic sentiment indicator increased by 5.3 points compared to the previous quarter, to 106.8 points, which is about 6.7 points lower than a year earlier (113.5 points).

More comprehensive information on the changes in the components of euro area and EU GDP in the first quarter of 2023 and the remaining macroeconomic variables, as well as on their trends anticipated in the coming period is provided next in this sub-subsection.

**Table 2.2**  
Economic Sentiment Indicator EU-27 & Euro Area (av. 2000-2020=100)

Month	Apr-21	May-21	June-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22
EU-27	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
Euro Area	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5



EU-27 (2020)	108.8	112.8	115.8	116.6	115.3	115.3	116.2	115.2	114	112.6	113.3	105.7
Euro area	109.4	113.4	116.7	117.6	116.3	116.4	117.2	116.2	114.3	113.1	114.1	106.1

Month	Apr-22	May - 22	June - 22	Jul- 22	Aug- 22	Sep- 22	Oct - 22	Nov - 22	Dec - 22	Jan - 23	Feb - 23	Mar - 23
EU-27 (2020)	103.9	103.6	101.9	97.8	97.1	93.9	92.9	94.1	95.6	97.8	97.7	97.4
Euro area	104.3	104.2	103.1	98.6	97.8	94.4	93.8	95.1	97	99.7	99.6	99.3

Source: European Commission (DG ECFIN), March 2023

The estimations for the period 2023-2024, as reported for the EU and the euro area, are presented in the latest forecast of the European Commission (Table 2.3). A summary of key macroeconomic variables by member state of the euro area is presented in the Appendix.





**Table 2.3**

Key macroeconomic figures, EE-27, Eurozone (real annual % changes, unless otherwise stated)

	EU			Eurozone		
	2022	2023	2024	2022	2023	2024
GDP*	3.5	0.8	1.6	3.5	0.9	1.5
Private Consumption	3.7	0.1	1.5	3.7	0.1	1.5
Public Consumption	1.3	0.3	0.8	1.4	0.3	0.8
Gross Investment	3	0.5	2.3	2.8	0.5	2.3
Exports of Goods and Services	6.3	2.1	3.6	6.6	2	3.4
Imports of Goods and Services	6.7	1.9	3.5	6.8	1.9	3.5
Employment	1.8	0	0.4	1.8	0.1	0.5
Unemployment (% labour force)	6.2	6.5	6.4	6.8	7.2	7
Inflation*	9.2	6.4	2.8	8.4	5.6	2.5
Balance of General Government (% GDP)	-3.4	-3.6	-3.2	-3.5	-3.7	-3.3
Debt of General Government (% GDP)	86	84.9	84.1	93.6	92.3	91.4
Current Account Balance (% GDP)	1.1	1.4	1.9	1.5	1.9	2.4

Source: European Economic Forecasts, Autumn 2022, European Commission, November 2022

\* European Economic Forecasts, Winter 2023, European Commission, February 2023

In detail, according to Eurostat data for the fourth quarter of 2022 (annual changes in seasonally adjusted data), private consumption in the European Union increased by 0.9%, while in the previous quarter, it increased more by 2.1% and in the same period of 2021 its trend was strongly positive (6.2%). In the euro area, household consumption increased by 1.2%, from a higher increase of 2.3% in the previous quarter, while a year earlier it had increased by 6.0%. The European Commission forecast last November that household consumption in the EU as a whole would increase by 3.3% in 2022 and remain almost unchanged in 2023 (0.3% growth). For the euro area, it predicted a 3.7% increase in private consumption in 2022 and a minimal expansion of 0.1% the following year (Table 2.3). At the country level, in Germany, private consumption was 0.9% higher than in the third quarter of last year, from 1.9% in the preceding quarter, while in France there was a slowdown in private consumption (1.1%). In Italy, it increased by 1.6%, a smaller increase compared to a quarter earlier 3.7%, while in Spain it grew by 2.7% from 4.8% in the preceding quarter. In Greece, private consumption rose 4.2%, from 5.6% in the previous quarter, while in the same period of 2021, it had increased by 12.3%.

Public consumption increased in the EU and the euro area in the fourth quarter of 2022 by 0.2% and 0.5% respectively, from 0.1% in both groups a quarter earlier. In the same quarter of 2021, public consumption had increased by 2.7% in the EU and in the euro area. For 2022, the European Commission expected in November a sharp slowdown in EU public consumption growth compared to 2021, to 1.3%. About the same growth was projected for the euro area (1.4%). In 2023 its growth is projected to weaken to 0.3% in both the EU and the EA.

Investment increased in the period from October to December 2022 in the EU by 1.7%, substantially less than in the previous quarter (10.6%). Similarly in the euro area, the rise was 10.6%, compared with 11.0% in the third quarter of last year. In the same quarter of 2021, investment had increased by 6.8% in the EU and 5.5% in the euro area. The European Commission forecast an increase of 3.0% for 2022 and 0.5% for 2023 in the EU, and 2.8% and 0.5% in the euro area. In the fourth quarter of 2022, investment increased by 4.0% in Germany, following a higher increase of 7.7% in the previous quarter, while Italy saw a decrease of 2.2%, but against a strong increase of 10.4% in the quarter of





July to September 2022. The rate of change in investment in France was positive, 6.5%, from an increase of 9.2% in the previous quarter.

Growth was recorded in exports of goods and services in the EU (5.1%) and in the euro area (5.0%), against stronger growth, by 8.1% and 7.6% respectively, in the previous quarter and stronger growth in the fourth quarter of 2021 (8.0% and 8.3%). For 2022, the European Commission forecast an increase in exports in the EU-27 compared to 2021 by 6.3% and a smaller increase in the following year of 2.1%. For the euro area, it expected a 6.6% growth in 2022 as a whole, and an increase of 2.0% in 2023. At the country level, Germany saw export growth of 1.3% in the fourth quarter of 2022, from a higher 5.2% increase in the third quarter of the year. Exports in France expanded by 4.3% in the fourth quarter of the same year, less than a quarter earlier (6.7%). Italy saw an increase of 9.9%, from a smaller increase of 7.9% a quarter earlier. A strong export expansion was recorded in Spain, by 6.9%, following a stronger increase of 14.1% in the previous quarter, as in Cyprus (10.4%), after an increase of 9.9% in the third quarter of 2022.

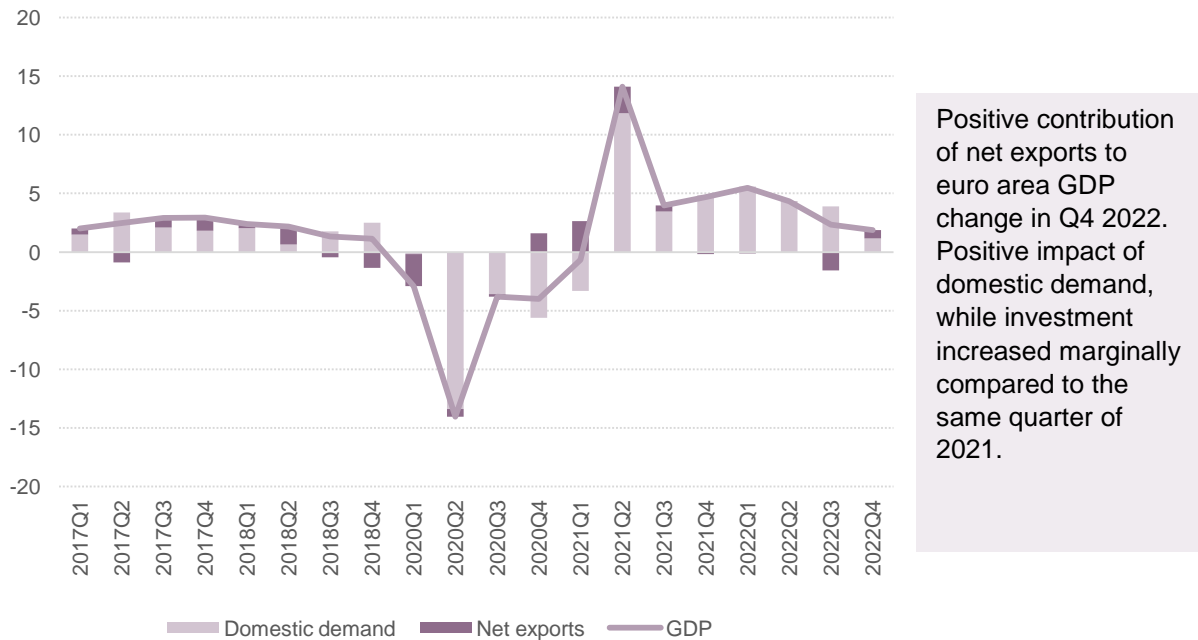
Imports into the EU increased in Q4 2022, by 3.6%, an increase well below that of a quarter earlier (10.7%). A similar change was observed in the EA, by 3.5%, from a higher increase of 11.1% in the previous quarter of 2022. A year earlier, there was an increase of 10.5% and 10.3% respectively. For the years 2022 and 2023, the European Commission has forecast an increase of 6.7% and 1.9% respectively for the EU. For the euro area, it expected growth by 6.8% in 2022 and by 1.9% in 2023. At the country level, imports in Spain increased by 2.4% in the fourth quarter of 2022, compared with a higher growth of 8.9% in the previous quarter. In France, they expanded by 6.3%, from 12.3% a quarter ago, while Italy saw an increase of 6.5% from a 14.2% increase in the preceding quarter. A positive pace was recorded in Germany (2.6%), against a stronger expansion in the third quarter of 2022 (9.2%).

Based on developments in the GDP components in the euro area (Figure 2.3), the contribution of net exports was positive (0.9%), compared with a negative impact in the previous quarter. The positive contribution of net exports in the fourth quarter last year came from a significant decrease in the negative contribution of imports from 5.2% in the third quarter to 1.7% in the last quarter of the year. At the same time, the contribution of exports also decreased but not to the same extent (2.6% in Q4 2022, down from 3.9% in the previous quarter). As already mentioned, the contribution of domestic demand reached 1.0% of GDP, from a positive impact of 3.6 percentage points in the previous quarter. The bulk of the contribution came from private consumption, which had a positive impact of 0.6% of GDP in the fourth quarter of 2022, while in the third quarter, its positive contribution was 1.2 pp.



Figure 2.3

Eurozone GDP change – Contribution of components to the real annual rate of change (in percentage points)



Source: Eurostat

Harmonised inflation increased in the fourth quarter of 2022 in the EU and the euro area, standing at 11.0% and 10.0%, from 10.3% and 9.3% respectively one quarter earlier. In the fourth quarter of 2021, harmonized inflation was 4.9% in the EU and 4.6% in EA respectively. Overall for 2022, the European Commission estimated recently (February 2023) that inflation had increased sharply in 2022 in EA to 8.4% from 2.6% and in the EU to 9.2% from 2.9%, while in 2023 it would fall to 5.6% and 6.4% respectively.

Employment gains were milder in the fourth quarter of 2022, by 1.3% in the EU and 1.5% in EA, from 1.5% and 1.8% in the EU and EA respectively one quarter earlier, while in the same period of 2021, jobs had increased by 2.4% in both zones. The European Commission projected growth (1.8%) and stagnation of job creation in the EU for 2022 and 2023. For the euro area, it also projected employment growth in 2022, by 1.8%, and near stagnation (0.1%) in 2023. Employment growth in the fourth quarter of 2022 was mainly recorded in Lithuania (4.1%), Estonia (3.7%), the Netherlands (3.4%), and Luxembourg (3.3%). No change in job levels was observed in Romania while the lowest employment growth was recorded in Hungary (0.6%) and Finland (1.1%).

Unemployment in the fourth quarter of 2022 remained almost stable compared to the third quarter at 6.2% in the EU and 6.8% in the euro area (against 6.1% and 6.7% respectively). In the fourth quarter of the previous year, it had stood at 6.5% in the EU and 7.1% in the EA. For 2022, the European Commission has estimated a decline in unemployment rates in the EU-27 and the euro area compared to the previous year, to 6.2% and 6.8%, while for 2023 it expects unemployment rates of 6.5% and 7.2%. Between October and December 2022, the highest unemployment rate was recorded in Spain (13.0%), with Greece (12.5%) and Italy (8.2%) coming next, while in Croatia unemployment was 7.5%.

In the area of fiscal performance, the general government deficit in the EU-27 in the third quarter of 2022 was 2.7% of GDP, while in the second quarter, it had stood at 1.3%. The European Commission has forecast that the budget deficit will stand at 3.4% and 3.6% of GDP respectively in 2022 and 2023. The euro area's average fiscal deficit is expected to reach 3.5% of GDP in 2022 and 3.7% in 2023. Public debt stood in the euro area countries in the third quarter of last year at 92.9% of GDP, while the



average is expected to stand at 93.6% in 2022, falling in the following year to 92.3% of GDP. Government debt, as a percentage of GDP, declined in the third quarter of 2022 in many member countries, with the highest level recorded in Greece (178.2%), Italy (147.3%), Portugal (120.1%), Spain (115.6%), and France (113.4%).

As regards the monetary policy framework, according to the ECB's announcement of 16 March 2023, the ECB increased its three key interest rates by 50 basis points on revised inflation expectations to ensure a timely return of inflation to the ECB's medium-term objective of 2.0%. The portfolio of the asset purchase programme (APP) gradually decreases by EUR 15 billion monthly on average until the end of the second quarter of 2023, as all amounts from the repayment of securities at maturity are not reinvested. With regard to the pandemic emergency purchase programme – PEPP, as a minimum by the end of 2024 the ECB will be reinvesting the principal amounts from the repayment of the purchased securities. The future roll-off of the PEPP portfolio will be regulated in a way that is consistent with monetary policy. Finally, the Transmission Protection Instrument (TPI) is available to offset undesirable, unforeseen market changes that may negatively affect the transmission of monetary policy in the euro area, with a view to price stability.

In brief, the economy in Europe, and in the Eurozone in particular, is currently facing a number of challenges. The main ones are:

- Russia's invasion of Ukraine and its economic consequences of high intensity and duration.
- Forecasts by international organisations for a slowdown in the euro area economy with inflation significantly above the target and with the expectation of a further tightening of monetary policy.
- The energy crisis with the possibility of a re-intensification at the end of 2023 and the need for multilateral interventions to ensure energy security and to support demand.
- The need for coordination of fiscal and monetary policies at the global and national levels in order to strike a balance between the objective of containing inflation expectations and avoiding an economic downturn.





## 2.2 The Economic Environment in Greece

### A. Economic Sentiment

- A significant increase in the Economic Sentiment Indicator in Greece in the first quarter of 2023 compared with the immediately preceding quarter (106.8 from 101.5 points). Slight decline compared to the same quarter of last year (112.8 units).
- Business confidence increased significantly in the recent quarter compared to the previous one in Industry and Construction, to a lesser extent in Retail trade, while it declined mildly in Services.
- The consumer confidence indicator improved significantly in the January-March period compared with the previous quarter, to -43.3 (from – 52.6) points. At the same time, it moved to a similar level as that recorded a year earlier (-43.6 points).

*The IOBE business and consumer surveys offer significant indications on the developments of the economy in the past few months, from the perspective of both the enterprises and the consumers. In addition, the indicators used in the surveys constitute leading indicators for various economic variables and can be used to predict near-term developments and even the course of GDP.<sup>2</sup>*

In the first quarter of 2023, the Economic Sentiment Indicator strengthened quarter on quarter by 5.3 points. The improvement was driven by a significant increase in business confidence in Construction and Industry, while expectations in Retail trade moved moderately up, with expectations in Services weakening slightly. At the same time, the consumer confidence indicator stood significantly higher than in the previous quarter, at -43.3 (from -52.6) points.

Expectations in the industry and construction sectors were systematically affected during 2022 by rising energy and other raw material prices due to the war in Ukraine, as well as by disruptions in the operation of international supply chains, but they recovered in 2023 and especially for the construction sector expectations are rising sharply. In the services sector, by contrast, the strong dynamics of international tourism had a positive effect on expectations during most of last year, allied with prolonged summer weather, especially in the last quarter of the year, with early 2023 finding business expectations on a downward path, especially in some more vulnerable sectors. On the household side, it appears in early 2023 that two opposing forces influence the evolution of consumer confidence. On the one hand, the effects of rising costs of living concern households about their financial situation in the short-term, but this is partly offset by successive packages of interventions to support the most vulnerable households and by announcements ahead of the upcoming elections.

In detail, the Economic Sentiment Indicator in Greece in the January-March quarter was significantly stronger compared to the previous quarter (Figure 2.4), at 106.8 from 101.5 points, while it was significantly lower than last year's average (112.8 points).

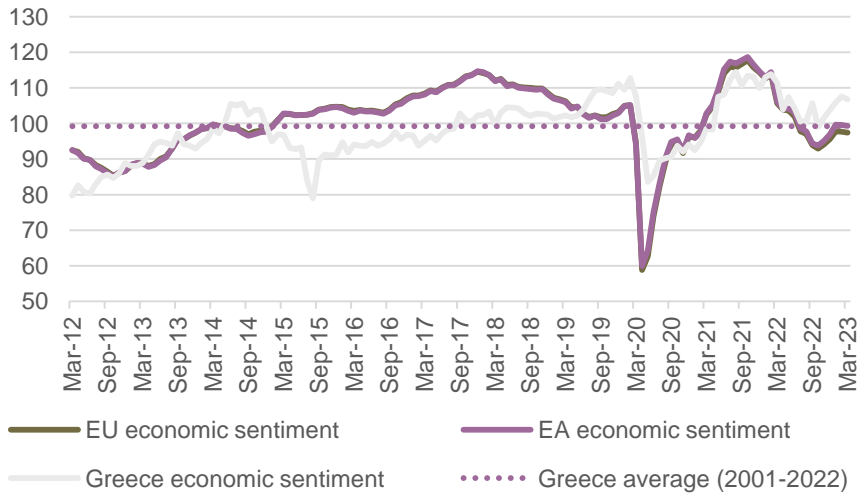
In Europe, the corresponding average index stood slightly higher in the period under review than in the previous quarter, both in the EU and in the euro area. Specifically, the Economic Climate Index stood at 97.6 (up from 94.2) in the first quarter of this year in the EU, and 99.5 (from 95.3 points) in the euro area.

<sup>2</sup> Note that since March 2018, the base period of the series presented in the sectoral business sentiment indicators, i.e. the indicators in Manufacturing, Retail Trade, Services and Construction, has changed. In particular, the 2000-2010 period was designated as a new base (= 100). Until February 2018, the indicator was referenced to average values from the 1996-2006 period. The historical series of the indicators are fully revised, in order to ensure that the data series are comparable. As a result, the indicators with the new base period are overall higher compared with those with the older base period. The change in the base period by IOBE has not affected the overall economic sentiment indicator for Greece or any other country.



Figure 2.4

Economic Sentiment Indicators: EU-27, Euro area and Greece (2000-2020=100, seasonally adjusted data)



Source: European Commission, DG ECFIN

At the sectoral level, business confidence in Greece increased significantly in Construction, while it improved mildly in Retail trade and weakened in Services. On the consumer confidence side, the consumer confidence indicator strengthened significantly compared to the previous quarter. Compared with the same quarter of last year, the indicator strengthened significantly in Industry and more strongly in Services, while they strengthened significantly in Construction and Trade. In more detail:

The consumer confidence indicator in Greece in the January-March quarter of this year was significantly higher on average than in the fourth quarter of 2022, at -43.3 from -52.6 points, at a level equivalent to that of last year (-43.6 points). The corresponding average index improved mildly in the EU, to -21.1 (from -25.8 points), and in the euro area (-19.7 from -24.4 points). These levels are much lower than those recorded a year ago (-14.7 and -13.7 points respectively).

The trends in the individual key balances of responses that make up the overall indicator were mainly positive in the first quarter of 2023 compared with the immediately preceding quarter. Thus, the pessimistic expectations of consumers in Greece for the financial situation of their households over the next 12 months declined slightly, while those for the economic situation of the country eased more substantially. At the same time, the households' assessment of their current situation improved slightly, while the intention for major purchases over the coming period remained unchanged.

In particular, the percentage of those who were pessimistic about the financial situation of their household over the coming 12 months declined mildly, to 54% (from 64% in the previous quarter), while the percentage of those stating the opposite rose to 8% (from 3%). At the same time, the percentage of consumers in Greece who were holding pessimistic expectations about the country's economic situation fell to 58% (from 70%), with 13% (from 8%) expecting an improvement. In terms of the intention to save, the percentage of households that did not assess savings as likely over the coming 12 months eased to 85% (from 87%), while the percentage of those considering it likely improved marginally to 14%. In the expectations about unemployment, the percentage of those believing the situation would deteriorate fell to 41% (from 56%), with 22% (from 11%) on average expressing an opposite view. The proportion of consumers reporting that they were running into debt in the first quarter of 2023 remained at 7%, marginally lower than in the same quarter of 2022 (8%). The share of respondents saying that they were saving a little also marginally weakened to 16% (from 20% in the corresponding quarter of 2022). Finally, the percentage of those reporting that they were

The Economic Sentiment Indicator in the first quarter of 2023 strengthened quarter on quarter by 5.3 points.

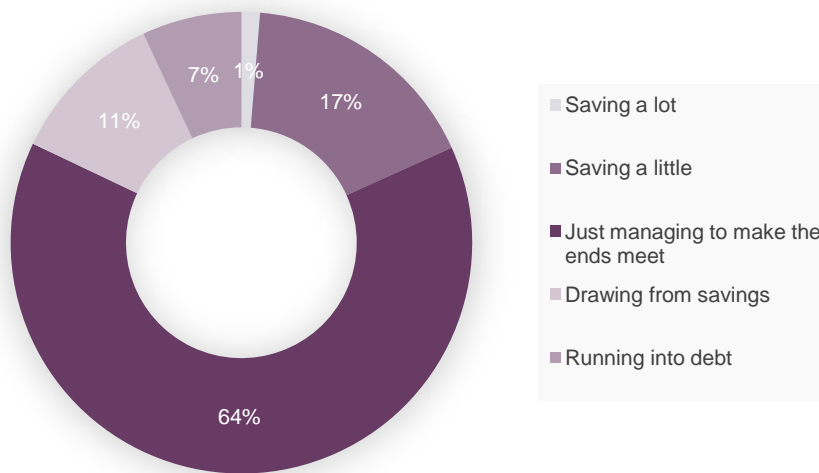


just making ends meet increased mildly to 64%, and the proportion of households reporting that they were drawing from their savings fell slightly to 11% (from 13%), corresponding to the 2022 level (11% - Figure 2.5).

The confidence indicator in Industry in the first quarter of 2023 stood at 109.4 (down from 97.3 in the fourth quarter of 2022), significantly lower than in 2022 (116.9 points). In key activity data, the indicator on expectations for short-term output developments strengthened significantly in the quarter under review and stood on average at + 26.9 points from + 5.1 points in the fourth quarter of 2022. At the same time, the mild negative estimates for the level of orders and demand eased to -5.9 from -10.3 points. The estimates for stocks of finished products suggest a noticeable decline (to +3.8 from +12.7 points). The trends in the export indicators are mostly negative - while the expectations for the export dynamics for the next quarter improved significantly (+21.6 from +10.1 points), the current assessment for exports of the sector moved slightly down (to +5.6 from +12.6 points) and the assessment for orders and foreign demand declined mildly (-14.2 from -9.5 points). In the employment expectations, the relative average quarterly balance improved significantly, to +11.6 (from +1.1 points on average). The capacity utilisation rate fluctuated slightly lower, around 74.2% on average (from 76.0%), while the months of assured production increased slightly to 5.2 (from 4.9) months on average.

**Figure 2.5**

Consumer survey data on the financial situation of households (January-March 2023)



Higher quarter on quarter percentage of respondents indicating that they were just making ends meet (64%); no change in the percentage of those running into debt

Source: IOBE

The retail trade confidence indicator in the quarter under review was significantly higher than in the previous quarter, at 111.6 points (from 104.7 points), slightly lower than in the same quarter of last year. Among the key components of the index, the average balance for current sales estimates improved significantly to +40 (from +14) points. Of the companies in the sector, 16% (from 26%) were reporting that their sales fell, with 56% (up from 40%) stating the opposite assessment. In terms of projected sales, the +12 point indicator increased slightly to +17 points, with stocks expanding mildly (to +1 point). Among the rest of the activity data, the balance of expectations for orders from suppliers moved substantially up to +13 points (from -8 points), while at the same time, in terms of employment in the sector, the average balance of expectations moved slightly up, to +28 (from +20). Finally, in terms of prices, the balance remained at strong inflationary levels (+57 from +62 points), with only 1% of the firms expressing expectations of price decline and 58% (from 62%) expecting the opposite outcome. Business confidence improved in the first quarter of 2023 in all individual retail subsectors except for food-beverages, where there was a notable decline.

Business confidence in Construction increased sharply in the first quarter of 2023, with the relative balance standing at 145.2 points on average, from 106.2 points in the previous quarter, posting the largest change among the main sectors of activity. This performance is slightly lower than in the corresponding quarter of 2022. Among the key variables, employment expectations in the sector strengthened significantly, with the relative balance moving from +18 points to +48 points, as 61% (from 44%) of the enterprises were expecting more jobs, when 13% (from 26%) were expecting a decrease in employment. The firms' negative expectations for planned works eased to -43 from -68 points, while their assessment of the current level of their work programme significantly strengthened (to +1 from -11 points).

The months of secured activity of firms in the sector strengthened significantly, to 14.0, while the balance in price expectations moved slightly down to +36 (from +44) points, with 7% of the firms expecting their decline in the short term and 42% (from 52%) their rise. Finally, the percentage of enterprises reporting that they were not facing obstacles to their operation fell to 16% (from 19%), while among the remaining enterprises, 16% (from 21%) referred to labour shortages, as the biggest obstacles to their operation, 25% (from 28%) to low demand, 20% to insufficient funding, and only





12% to factors such as the general economic situation of the country, high prices of raw materials, lack of projects, delayed payments by the state, etc. At the subsectoral level, business expectations moved mildly up in private construction, in contrast to public works, which also moved up but more strongly.

The confidence indicator in Services in the quarter under review was mildly lower than in the previous quarter, at 96.6 points (down from 101.2), performing at the same level as in the corresponding quarter of 2022. Of the key components of the indicator, the estimates of current demand weakened sharply, with the relative indicator declining 20 points on average to +4 points. The assessment for the current situation of the company's financials also moved sharply down (+10 from +27 points on average), while the balance of expectations for short-term demand of the sector strengthened significantly (+23 from +2 points). Among the remaining activity data, the respondents' balance of employment expectations improved notably, expanding by 21 points to +22 points, while the average indicator of the firms' price expectations moved up slightly to +32 (from +20) points. Finally, the percentage of respondents reporting an unhindered business operation declined marginally to 25%, with 22% declaring as the main obstacle to their operation insufficient demand, 11% shortage of labour, 14% insufficient working capital, and 24% (from 27%) other factors linked to the general economic situation, energy prices, the war in Ukraine, etc. Among the subsectors, the indices declined slightly in the first quarter of 2023 in hotels-restaurants-tourist agencies, miscellaneous business activities, and IT services and more strongly in land transport, while an even stronger improvement was observed in financial intermediaries.



**Table 2.4**  
Economic Sentiment Indicators

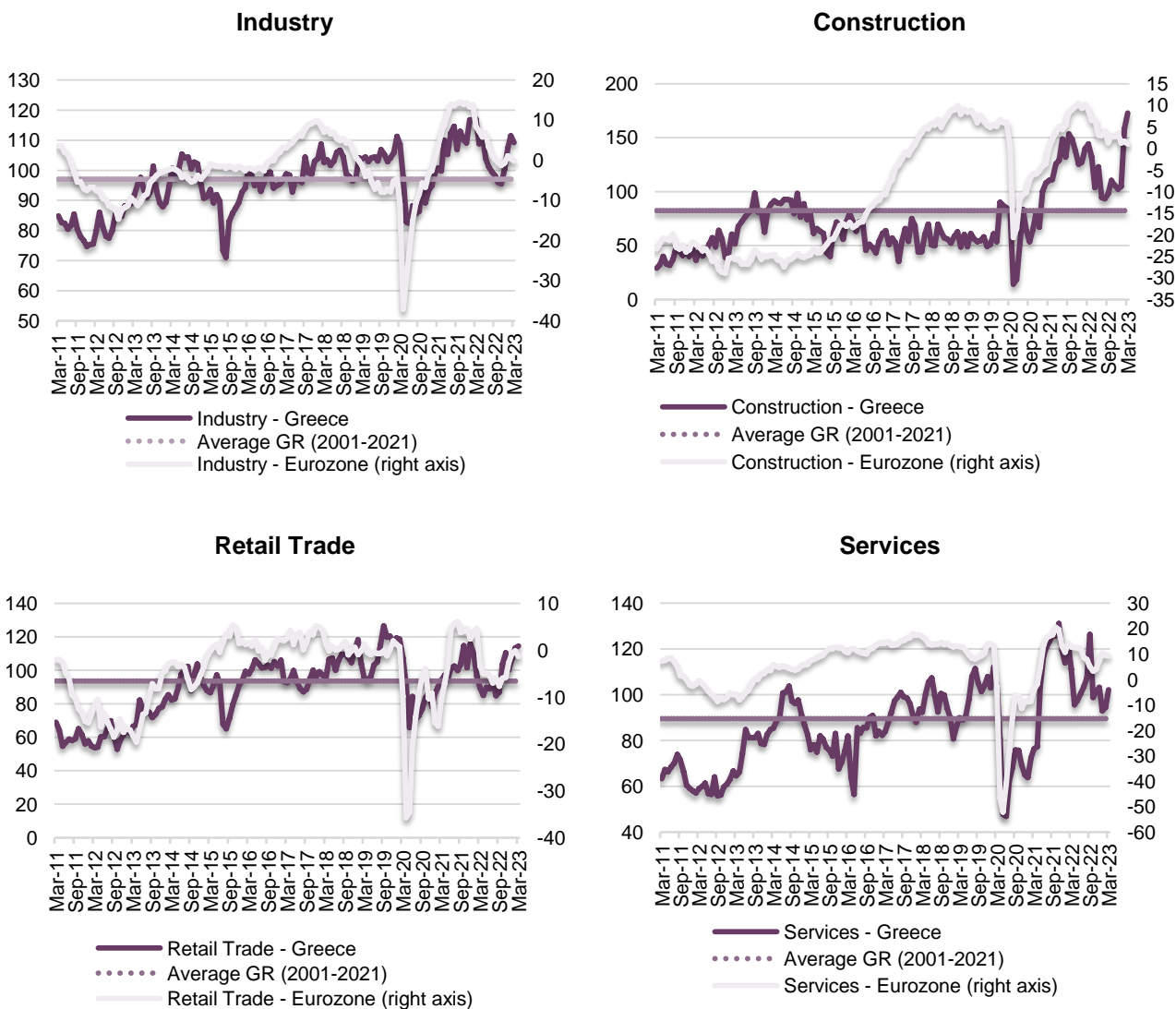
Time Period	Economic Sentiment Indicator			Business Expectations Index (Greece)				Consumer Confidence Index (Greece)
	EU-27	Eurozone	Greece	Industry	Construction	Retail Trade	Services	
2010	98.6	98.3	85.5	79.9	52.2	61.3	68.1	-57.9
2011	98.3	98.4	83.9	81.1	37.7	60.9	66.1	-69.8
2012	89.0	89.0	83.6	81.4	47.5	59.1	58.8	-73.8
2013	91.9	91.8	93.6	92.6	71.5	72.6	75.3	-69.7
2014	98.6	98.3	101.7	99.7	88.4	92.3	93.3	-53.0
2015	102.9	102.8	91.6	86.3	62.0	83.9	78.2	-51.6
2016	104.4	104.1	95.0	96.1	61.3	101.4	79.3	-61.3
2017	110.7	110.5	98.5	98.1	55.4	94.6	92.7	-58.0
2018	111.1	110.9	103.3	102.8	58.1	104.5	97.0	-44.1
Q1 2019	106.9	106.5	102.1	101.8	56.7	105.8	85.7	-32.8
Q2 2019	104.3	104.3	103.8	103.8	54.8	97.8	92.6	-30.9
Q3 2019	102.0	101.9	108.7	104.8	52.7	115.5	108.2	-10.6
Q4 2019	102.3	101.7	109.1	104.1	68.1	119.1	104.4	-4.2
Q1 2020	102.0	101.5	109.9	108.6	84.9	115.1	106.5	-14.4
Q2 2020	65.9	67.5	89.1	87.6	28.1	80.3	58.6	-38.3
Q3 2020	88.5	89.8	90.0	86.7	67.0	73.5	68.8	-37.0
Q4 2020	93.9	94.5	93.1	92.6	70.7	83.0	70.0	-40.2
Q1 2021	99.2	99.1	96.5	98.2	106.2	90.2	70.9	-40.7
Q2 2021	109.5	110.6	105.5	105.0	121.9	97.9	99.3	-28.3
Q3 2021	115.8	117.4	111.6	111.3	144.7	102.0	123.4	-33.6
Q4 2021	115.1	115.9	112.8	110.7	137.2	110.7	125.4	-38.8
Q1 2022	110.7	111.2	113.4	116.9	137.2	98.8	115.7	-43.6
Q2 2022	103.1	103.9	105.2	108.0	119.6	87.9	97.9	-53.0
Q3 2022	96.3	96.9	102.3	99.6	95.2	88.3	112.3	-53.6
Q4 2022	94.2	95.3	101.5	97.3	106.2	104.8	101.2	-52.6
Q1 2023	97.6	99.5	106.8	109.4	145.2	111.6	96.6	-43.3

Sources: European Commission, DG ECFIN, IOBE



Figure 2.6

Business Confidence Indicators



Source: IOBE

Business expectations strengthened significantly quarter on quarter in the first quarter of 2023 in industry and construction, and to a lesser extent in retail trade, weakening slightly in services.



## B. Fiscal developments

- 2022 State Budget balance on a cash basis: A deficit of EUR 11.656 million (5.5% of GDP) against a deficit target of EUR 13.400 million indicated for the same period of 2022 in the introductory report of the 2023 Budget and a deficit of EUR 14.872 million (8.2% of GDP) in the corresponding period of 2021.
- 2022 primary balance on a cash basis: A deficit of EUR 6,652 million (3.2% of GDP), against a primary deficit target of EUR 8,506 million and a primary deficit of EUR 10.327 million (5.7% of GDP) for the same period in 2021.
- State Budget balance, Jan.-February 2023: Government budget surplus of EUR 2,308 million (1.0% of GDP) against a surplus target of EUR 36 million included for the same period of 2023 in the introductory report of the 2023 Budget.
- State Budget primary balance, Jan.-February 2023: A surplus of EUR 4,215 million (1.9% of GDP), against a primary surplus target of EUR 1,816 million and a primary surplus of EUR 840 million (0.4% of GDP) for the same period in 2022.

### Execution of the 2022 budget

Both the pandemic and the international energy crisis determined, for the most part, the country's fiscal trajectory in 2022. The cost of the energy and health crisis measures, introduced to support households, businesses, and government bodies, amounted to EUR 10.6 billion in 2022. Their fiscal cost for the budget, however, reached EUR 4.8 billion. The remainder came from the revenues of the energy transition fund.

The energy crisis measures implemented in 2022 include subsidising domestic and corporate tariffs on electricity and natural gas, reimbursement of 60% of the electricity hike in household tariffs, permanent reduction of the Value Added Tax (VAT) on animal feed and fertilisers, prepaid card for fuel to households, subsidy for diesel, refund of excise duty on motor oil to professional farmers and subsidy to livestock farmers to compensate for higher feed costs. Almost a third of these interventions concerned vulnerable households.

In more detail, the main interventions addressing the energy crisis were: a) subsidies for the consumption of electricity and natural gas of households and enterprises (total fiscal cost of EUR 8.1 billion); b) reimbursement of 60% of the increase in electricity tariffs for households (fiscal cost EUR 296 million); c) subsidies to electricity and natural gas (EUR 8.1 billion); (d) increase the heating allowance for the winter period 2022-2023 to EUR 300 million; of which EUR 150 million relate to fiscal year 2022 and the remaining EUR 150 million concern fiscal year 2023 and a subsidy for heating and motor oil; e) implementation of the fuel pass measure (prepaid card to buy fuel) for a total of six months, from April to September 2022 (fiscal cost EUR 300 million); f) subsidies for farmers to compensate for the higher cost of fertilisers and animal feed, a reduction in VAT on animal feed and fertilisers, and the refund of the excise duty on motor oil to farmers (total fiscal cost of EUR 212 million); g) financial support for vulnerable households (low-pension beneficiaries, uninsured seniors of OPEKA, people with disabilities, etc.) in April 2022 and December 2022, with a total budgetary cost of EUR 816 million.



## State Budget Balance and Primary Balance 2022

According to the state budget execution data, on a modified cash basis, for the period January – December 2022, a deficit in the state budget balance of EUR 11.656 million (5.5% of GDP) was recorded against a deficit target of EUR 13.400 million included for the corresponding period of 2022 in the introductory report of the 2023 Budget and a deficit of EUR 14.872 million (8.2% of GDP) in the corresponding period of 2021. The primary balance stood at a deficit of EUR 6,652 million (3.2% of GDP), against a primary deficit target of EUR 8,506 million and a primary deficit of EUR 10.327 million (5.7% of GDP) for the same period in 2021. The year-on-year improvement in the SB balance came from a stronger increase in net revenue (+8.6% or +EUR 4.75 billion) relative to expenditure (+2.2% or +EUR 1.53 billion, Table 2.5).

**Table 2.5**

State Budget Revenue, Expenditure and Deficit (€ million)

	2021	2022	% Change 22/21	2022 Budget	2023* Budget	% Change 23B/22B
I. SB NET REVENUE (1+2)	54,878	59,623	8.6	59,853	62,139	3.8
1. Net OB revenue	47,999	54,324	13.2	53,676	57,573	7.3
OB revenue before tax refunds	53,102	60,477	13.9	59,669	63,683	6.7
Less Tax refunds	5,103	6,153	20.6	5,993	6,110	2.0
2. PIP revenue +RRF <sup>3</sup>	6,879	5,299	-23.0	6,177	4,566	-26.1
II. SB EXPENDITURE (3+4)	69,750	71,279	2.2	73,253	69,945	-4.5
3. OB expenditure	60,749	60,254	-0.8	61,637	57,983	-5.9
Primary expenditure OB	55,876	55,215	-1.2	56,714	50,983	-10.1
Interest	4,873	5,039	3.4	4,923	7,000	42.2
4. PIP expenditure + RRF <sup>4</sup>	9,001	11,025	22.5	11,616	11,962	3.0
III. SB Deficit (-)/Surplus (+)	-14,872	-11,656		-13,400	7,806	
% of GDP	-8.2	-5.5		-7.2	-3.5	
IV. SB Primary Balance	-10,327	-6,652		-8,506	-806	
% of GDP	-5.7	-3.2		-4.5	-0.4	
GDP	181,675	210,170	15.7	187,278	224,134	19.7

\*Estimates in the 2023 Budget introductory report.

Sources: Monthly SB Execution Bulletin December 2022, Ministry of Finance, January 2023, Budget Introductory Report 2022, November 2021.

### Ordinary budget revenue

The net revenue of the state budget amounted to EUR 59.623 million, showing a decrease of EUR 230 million or 0.4% compared to the estimate for the corresponding period included in the 2023 Budget introductory report and an increase of 8.6% compared to 2021. The small decrease in relation to the target is mainly due to reduced PIP revenues of EUR 878 million, as well as to the fact that due to the extension of the deadline for payment of the road tax until the end of February 2023, it is estimated that an amount of EUR 486 million planned to be collected in 2022 will eventually be collected in 2023. By contrast, EUR 367 million were collected as an extraordinary levy of 90% of the increase in the gross profit margin of electricity producers for the period October 2021 – June 2022, which was not initially planned.

Most categories showed an increase compared to 2021. The Ordinary Budget revenue increased by 13.9%, while net OB revenue increased by 13.2%, with tax refunds growing by 20.6%. Income tax revenues increased by 15.8% compared to 2021, both by an increase in corporate tax revenues

<sup>3</sup> The PIP category now includes the flows of the Recovery and Resilience Fund for 2021 and 2022

<sup>4</sup> As above



(+37.2%) and by an increase in tax revenues for individuals (+8.6%). The revenue from taxes on goods and services increased by 18.1%, primarily from a 22.9% increase in VAT revenue. Significant growth was recorded in sales of fixed assets (+200%), import duties and taxes (+41.3%), sales of goods and services (+36.3%), and other current revenue (+32.3%). Conversely, a decrease was observed in transfers (-26.8%) and other current revenue (-14.0%), due to lower revenue of PIP+RRF (Table 2.6).

**Table 2.6**  
State Budget Revenue (€ million)

	2021	2022	% Change 22/21	2022 Budget	2023* Budget	% Change 23B/22B
Net SB revenue	54.878	59.623	8,6	59.853	62.139	3,8
Net OB revenue	47.999	54.324	13,2	53.676	57.573	7,3
Tax refunds	53.102	60.477	13,9	59.669	63.683	6,7
OB revenue	5.103	6.153	20,6	5.993	6.110	2,0
Income tax, of which:	14.697	17.012	15,8	16.681	17.772	6,5
--Personal	10.173	11.047	8,6	11.078	11.319	2,2
--Corporate	3.374	4.629	37,2	4.305	5.094	18,3
Property tax	2.652	2.692	1,5	2.527	2.380	-5,8
Taxes on donations, inheritance etc.	198	226	14,1	226	226	0,0
Tariffs	305	431	41,3	423	424	0,2
Taxes on goods and services, of which:	26.736	31.584	18,1	31.418	32.504	3,5
--VAT	17.431	21.422	22,9	21.306	22.198	4,2
--Excise duties	6.659	6.984	4,9	7.073	7.117	0,6
Other production taxes	1.086	1.165	7,3	1.281	1.067	-16,7
Other current taxes	2.452	2.108	-14,0	2.579	2.375	-7,9
Social contributions	55	56	1,8	55	55	0,0
Transfers	8.690	6.357	-26,8	6.904	6.972	1,0
Sales of goods and services, of which:	611	833	36,3	782	837	7,0
Other current revenue	2.495	3.301	32,3	2.956	3.613	22,2
Sales of fixed assets	4	12	200,0	13	24	84,6
PIP + RRF Revenue <sup>5</sup>	6.879	5.299	-23,0	6.177	4.566	-26,1

\* Estimates in the 2023 Budget introductory report.

Sources: Monthly SB Execution Bulletin December 2022, Ministry of Finance, January 2023, Budget Introductory Report 2022, November 2021.

<sup>5</sup> The PIP category includes the flows of the Resilience and Recovery Fund for 2021 and 2022.



## Ordinary Budget Expenditure

State Budget expenditure for January-December 2022 amounted to EUR 71.279 billion, showing a decrease of EUR 1.98 billion or 2.7% against the target (EUR 73.253 billion), included in the introductory report of the 2023 Budget, albeit higher by EUR 1.53 billion or 2.2% compared to last year.

Year on year, OB expenditure fell by 0.8% while the fall in primary expenditure reached 1.2%, with interest expenditure growing by 3.4%. Transfers decreased by 5.3%, with those concerning SSFs falling by 1.2%. Most subcategories increased compared to last year. In particular, social benefits increased by 39.1%, purchases of goods and services by 7.7%, subsidies by 15.6%, and purchases of fixed assets by 30.8% (Table 2.9).

The decline in transfers would have been wider if the extraordinary expenditure payments related to interventions in response to the energy crisis had not been made. The main expenditure payments for budgetary measures taken in response to the pandemic for the period January-December are as follows: a) support of small and micro-enterprises affected by COVID-19 in the Regions amounting to EUR 160 million from the PIP, b) public contribution for the repayment of business loans to affected borrowers of EUR 90 million from the PIP, c) working capital subsidy to tourism enterprises of EUR 42 million from the PIP, d) reinforcement of health institutions with auxiliary staff in the Regions amounting to EUR 103 million from the PIP; e) exceptional subsidy of EUR 44 million from the PIP for entertainment businesses, gyms, dance schools, and other affected enterprises; special purpose compensation expenditure of EUR 163 million paid by the Ministry of Labour and Social Affairs (transfers category); f) additional grants to EOPYY, amounting to EUR 115 million, and to hospitals and regional health authorities, amounting to EUR 281 million, as well as for the purchase of vaccines of EUR 320 million; h) additional grant to DYPA (formerly OAED) of EUR 594 million to cover the loss of revenue due to the reduction of employees' social security contributions and the grant to e-EFKA of EUR 372 million to cover the loss of revenue from the reduction of contributions; i) expenditure of EUR 296 million to cover employee social security contributions when implementing mainly the SYN-ERGASIA mechanism and the programme of 150.000 new subsidised jobs; and j) EUR 68 million state compensation to landlords due rent reductions. It should be noted that their total (EUR 2.65 billion) is much smaller than a year ago (EUR 9.32 billion), which is reflected in the widespread decline in transfers and subsidies mentioned above.

As regards measures to address the energy crisis, the situation is as follows: a) a transfer payment to OPEKA (April and June) of EUR 207 million, broken down into the following components: EUR 120 million for an extraordinary tranche of the child benefit; EUR 46 million for the payment of an income support supplement to the beneficiaries of the guaranteed minimum income; EUR 33 million for extraordinary financial assistance to persons with disabilities; and EUR 7 million for an increase in the pension of uninsured seniors, as well as a transfer payment to OPEKA (December) of EUR 221 million which is broken down into the following components: EUR 122 million for an extraordinary tranche of the child benefit; EUR 47 million for the payment of an increase in income support for beneficiaries of the guaranteed minimum income; EUR 43 million for extraordinary financial assistance for persons with disabilities; and EUR 9 million for an increase in the pension of uninsured seniors; b) a grant to e-EFKA of EUR 135 million in May and of EUR 250 million in December, for an exceptional financial support of vulnerable pensioners, c) a grant to the Information Society for the support of natural persons and freelancers in order to cope with the increase in fuel costs (fuel pass) of EUR 302 million and higher electricity bills (power pass) of EUR 296 million; d) a grant to OPEKEPE of EUR 50 million to address the consequences on Greek livestock farming due to international developments; as well as aid of EUR 60 million to farms due to the increase in the cost of fertilisers, e) special purpose compensation to support taxi operators and drivers of EUR 5 million, f) diesel subsidy of EUR 217 million, g) heating oil subsidy of EUR 90 million and (h) reinforcement of the energy transition fund by EUR 1,600 million.

**Table 2.7**





State Budget Expenditure (€ million)

	2021*	2022*	% Change 22/21	2022 Προϋπ.	2023* Προϋπ.	% Change 23Π/22
SB Expenditure (1+2+3)	69,750	71,279	2.2	73,253	69,945	-4.5
OB Expenditure (1+2)	60,749	60,254	-0.8	61,637	57,983	-5.9
1.Primary OB Expenditure	55,876	55,215	-1.2	56,714	50,983	-10.1
Compensation of employees	13,494	13,640	1.1	13,694	13,756	0.5
Social benefits	281	391	39.1	368	397	7.9
Transfers	37,038	35,086	-5.3	34,496	31,620	-8.3
<i>(of which SSFs)</i>	21,555	21,155	-1.9	21,421	21,449	0.1
Purchase of goods and services	1,992	2,145	7.7	2,429	1,431	-41.1
Subsidies	346	400	15.6	419	80	-80.9
Other current expenditure	52	55	5.8	91	81	-11.0
Non allocated expenditure	0	0	-	1,671	15,351	818.7
Purchase of fixed assets	2,672	3,496	30.8	3,545	229	-93.5
2. Interest (gross basis)	4,873	5,039	3.4	4,923	7,000	42.2
3. PIP + RRF Expenditure <sup>6</sup>	9,001	11,025	22.5	11,616	11,962	3.0

\* Estimates in the 2023 Budget introductory report.

Sources: Monthly SB Execution Bulletin December 2022, Ministry of Finance, January 2023, Budget Introductory Report 2022, November 2021.

**Public Investment Programme (PIP)**

The revenues of the Public Investment Programme (PIP) and the revenue of the RRF (measured together according to the new categorisation) amounted to EUR 5,299 million, lower by 23.0% compared to last year. However, without taking into account the disbursement of the RRF tranche, the revenues of the PIP amounted to EUR 3.581 million, down by EUR 878 million compared to the target and by 988 million or 21.6% compared to last year. Expenditure amounted to EUR 11.025 million, higher by 22.5% compared to last year due to the large increase in RRF expenditure (from EUR 307 million to EUR 2.84 billion). The expenditure of the RRF increased significantly because of the execution of many projects under the “Greece 2.0” plan that began at the start of 2022.

**Execution of the 2023 budget (January - February)**

Over the past three years, the European Union countries have taken extensive fiscal support measures for households and businesses to first address the impact of the pandemic and then the consequences of the energy crisis. This extensive support was made possible by the activation in early 2020 of the general escape clause from the fiscal rules of the Stability and Growth Pact. However, according to a recent announcement by the European Commission, the escape clause will be deactivated in 2024 to start reducing public debt that has exceeded 60% in many countries. Therefore, the scope for increasing public spending will now be much narrower. The European Commission will make country-specific recommendations from May 2023. In Greece, the country with the highest debt ratio in Europe (over 170% of GDP), fiscal consolidation has already started, as a primary surplus target has been set for 2023. The main goals of the European Commission are to improve debt sustainability and at the same time boost the growth rate of all Member States with an emphasis on the implementation of investments, especially those relating to the green and digital transitions. As inflation is gradually easing, there is also an expectation of the gradual lifting of the support measures.

**Balance and primary balance of the State Budget**

<sup>6</sup> The PIP category now includes the flows of the Recovery and Resilience Fund for 2021 and 2022





According to the state budget execution data, on a modified cash basis, for the period January – February 2023, there is a surplus in the state budget balance of EUR 2,308 million (1.0% of GDP) against a surplus target of EUR 36 million included for the same period of 2023 in the Budget Introductory Report 2023 and a deficit of EUR 910 million (0.4% of GDP) in the corresponding period of 2022. The primary balance stood at a surplus of EUR 4,215 million (1.9% of GDP), against a primary surplus target of EUR 1,816 million and a primary surplus of EUR 840 million (0.4% of GDP) in the same period in 2022. The improvement in the balance of the SB in the first two months of the year compared with last year is due to a stronger increase in net revenue (+46.5% or EUR 4.11 billion) relative to expenditure (9.2 % or EUR 895 million, Table 2.8).

**Table 2.8**

State Budget execution: January-February 2023\* (€ million)

	Jan. – February		% Change 23/22	2022*	2023* Προϋπ.	% Change 23E/22
	2022*	2023*				
I. SB NET REVENUE (1+2)	8.853	12.966	46,5	59.623	63.885	7,1
1. Net OB revenue	8.426	9.832	16,7	54.324	56.000	3,1
OB revenue before tax refunds	9.068	10.616	17,1	60.477	62.110	2,7
Less Tax refunds	642	784	22,1	6.153	6.110	-0,7
2. PIP revenue <sup>7</sup>	427	3.134	634,0	5.299	7.885	48,8
II. SB EXPENDITURE (3+4)	9.763	10.658	9,2	71.279	67.929	-4,7
3. OB expenditure	8.429	9.339	10,8	60.254	55.967	-7,1
Primary expenditure OB	6.673	7.431	11,4	55.215	50.116	-9,2
Interest	1.756	1.908	8,7	5.039	5.851	16,1
4. PIP expenditure <sup>8</sup>	1.334	1.319	-1,1	11.025	11.962	8,5
III. SB Deficit (-)/Surplus (+)	-910	2.308		-11.656	-7.985	
% of GDP	-0,4	1,0		-5,5	-3,6	
IV. SB Primary Balance	840	4.215		-6.652	-2.134	
% of GDP	-0,4	1,9		-3,2	-1,0	
GDP (in current prices)	210.170	224.134	6,6	210.170	224.134	6,6

Source: Monthly SB Execution Bulletin February 2022, Ministry of Finance, March 2023.

\* On a modified cash basis. According to the new revenue classification valid from 01/01/2019.

### Ordinary budget revenue

The state budget's net revenue amounted to EUR 12.966 million in the first two months of 2023, an increase of EUR 1.962 million or 17.8% compared to the estimate for the corresponding period included in the Budget Introductory Report 2023 and by EUR 4.11 billion or 46.5% compared to the same period last year. This increase is mainly due to higher tax revenues, as well as higher PIP revenues. Part of the increase in tax revenues comes from the extension of the deadline for payment of the road tax until the end of February 2023, while it was anticipated that this amount would be collected in December 2022. The remaining amount of over-execution is due to a better performance of personal and corporate income taxes for the previous year, collected in instalments up to and including the end of February 2023, as well as by better VAT performance this year.

Most subcategories showed an increase compared to the first two months of 2022. Ordinary Budget revenue increased by 17.1%, while net OB revenue increased by 16.7%, with tax refunds increasing by 22.1%. Income tax revenues increased by 18.3% compared to the corresponding period of 2022, both by an increase in corporate tax revenues (+36.3%) and by an increase in tax revenues for individuals (+9.2%).

Revenue from taxes on goods and services increased by 16.6%, due to a 17.6% increase in VAT revenue. There was a significant increase in transfers (+ 676.8%) due to the increase in the revenues of the PIP. Large increases were observed in other current revenues (+129.8%), other current taxes

<sup>7</sup> The PIP category now includes the flows of the Recovery and Resilience Fund for 2021 and 2022

<sup>8</sup> As above



(+31.1%), sales of goods and services (+27.7%), and capital taxation (+27.8%). Conversely, a decrease was observed in ENFIA revenue (-46.8%), revenue from import duties and taxes (-15.9%), and sales of fixed assets, which fell to zero (-100.0% - Table 2.9).

**Table 2.9**

State budget revenues: January-February 2023\* (€ million)

	Jan. – February		% Change 23/22	2022*	2023* Προϋπ.	% Change 23E/22
	2022*	2023*				
Net SB revenue	8.853	12.966	46,5	59.623	63.885	7,1
Net OB revenue	8.426	9.832	16,7	54.324	56.000	3,1
<i>Tax refunds</i>	9.068	10.616	17,1	60.477	62.110	2,7
OB revenue	642	784	22,1	6.153	6.110	-0,7
Income tax, of which:	2.663	3.149	18,3	17.012	18.476	8,6
-- <i>Personal</i>	1.801	1.966	9,2	11.047	11.460	3,7
-- <i>Corporate</i>	642	875	36,3	4.629	5.662	22,3
Property tax	417	222	-46,8	2.692	2.380	-11,6
Taxes on donations, inheritance etc.	36	46	27,8	226	226	0,0
Tariffs	69	58	-15,9	431	424	-1,6
Taxes on goods and services, of which:	4.842	5.644	16,6	31.584	32.517	3,0
-- <i>VAT</i>	3.493	4.107	17,6	21.422	22.217	3,7
-- <i>Excise duties</i>	989	979	-1,0	6.984	7.115	1,9
Other production taxes	89	99	11,2	1.165	1.029	-11,7
Other current taxes	589	772	31,1	2.108	2.369	12,4
Social contributions	9	10	11,1	56	55	-1,8
Transfers	380	2.952	676,8	6.357	7.953	25,1
Sales of goods and services, of which:	112	143	27,7	833	2.418	190,3
Other current revenue	285	655	129,8	3.301	2.124	-35,7
Sales of fixed assets	4	0	-100,0	12	24	100,0
PIP Revenue <sup>9</sup>	427	3.134	634,0	5.299	7.885	48,8

Source: Monthly SB Execution Bulletin February 2023, Ministry of Finance, March 2023.

\* On a modified cash basis. According to the new revenue classification valid from 01/01/2019.

### Ordinary budget expenditure

State Budget expenditure for the period January-February 2023 amounted to EUR 10.658 million, lower by EUR 309 million compared to the target (EUR 10.967 million) included in the Budget Introductory Report 2023, while posting an increase compared to the corresponding period of 2022 by EUR 895 million or 9.2%, mainly due to higher ordinary budget transfers by EUR 687 million.

Under the Ordinary Budget, payments are lower than the target by EUR 139 million but higher by 10.8% compared to last year. The shortfall in relation to the target is mainly due to the deferral of payments for equipment expenditure of EUR 395 million and the underspending on called guarantees by EUR 135 million. It is worth noting, however, the frontloaded transfer of funds to hospitals of EUR 180 million and the grant to the Information Society of EUR 325 million, with a reallocation of funds from the reserve to promote actions in response to the energy crisis (earmarked funds), to serve the needs of the Market Pass, for the first months of its implementation. Primary OB expenditure increased by 11.4% compared to last year, with interest spending higher by 8.7%. An increase was recorded in social benefits (+18.8%), transfers (+16.4%), and employee compensation (+1.4%). By contrast, there was a decline in purchases of goods and services (-20.2%) and in purchases of fixed assets (-6.5%).

<sup>9</sup> The PIP category includes the flows of the Resilience and Recovery Fund for 2021 and 2022.



Table 2.10

State budget expenditure (€ million)

	Jan.- February		% Change 23/22	2022*	2023* Budget.	% Change 23E/22
	2022*	2023*				
SB Expenditure (1+2+3)	9.763	10.658	9,2	71.279	67.929	-4,7
OB Expenditure (1+2)	8.429	9.339	10,8	60.254	55.967	-7,1
1.Primary OB Expenditure	6.673	7.431	11,4	55.215	50.116	-9,2
Compensation of employees	2.225	2.256	1,4	13.640	13.796	1,1
Social benefits	64	76	18,8	391	397	1,5
Transfers	4.182	4.869	16,4	35.086	32.476	-7,4
<i>(of which SSFs)</i>	3.033	3.103	2,3	21.420	21.182	-1,1
Purchase of goods and services	124	99	-20,2	2.145	1.541	-28,2
Subsidies	0	54	-	400	80	-80,0
Other current expenditure	1	5	400,0	55	81	47,3
Non allocated expenditure	0	0	0,0	0	3.156	-
Purchase of fixed assets	77	72	-6,5	3.496	2.531	-27,6
2. Interest (gross basis)	1.756	1.908	8,7	5.039	5.851	16,1
3. PIP Expenditure <sup>10</sup>	1.334	1.319	-1,1	11.025	11.962	8,5

Source: Monthly SB Execution Bulletin February 2023, Ministry of Finance, March 2023.

\* On a modified cash basis. According to the new revenue classification valid from 01/01/2019.

### Public Investment Programme (PIP)

The revenues of the Public Investment Programme (PIP) and the revenues of the RRF amounted to EUR 3.134 million, up from EUR 427 million last year, posting an increase of 634.0%. However, without taking into account the disbursement of the second tranche of the RRF, which took place in mid-January, the revenues of the PPP amounted to EUR 1416 million, higher by EUR 631 million compared to the target and by EUR 989 million or 231.6% compared to last year. Expenditure totalled EUR 1,319 million, lower by EUR 170 million compared to the target and by 1.1 % compared to last year. The expenditure of the PIP, without taking into account the RRF, decreased by EUR 49 million or 3.7%. The expenditure of the PIP includes an amount of EUR 32 million to cover COVID-19 measures, the most important of which being the reinforcement of health institutions with auxiliary staff to respond to the needs due to the COVID-19 pandemic in the Regions and to subsidise existing small and medium-sized enterprises in the retail sector, which maintain a physical establishment, to develop, upgrade and manage an e-shop.

## C. Financial developments

- In the first quarter of 2023, the European Central Bank continued to raise key interest rates in order to ease inflationary pressures.
- The domestic banking system showed resilience to the turbulence of the international banking system in the United States and Switzerland in March.
- The cost of new borrowing in the private sector increased further in early 2023.
- Private deposits declined in January-February.
- Credit to firms continued to grow, offsetting the credit contraction to households.
- Non-performing loans (NPLs) on banks' balance sheets decreased in the fourth quarter of 2022 to 8.7% of total loans, for the first time since mid-2009.
- The use of liquidity-supply tools by the Eurosystem to Greek banks decreased markedly in early 2023.
- The timely implementation of the loan arm of the National Recovery and Resilience Plan as well as the new REPowerEU tool boosts the outlook for credit growth and investment in 2023 and in the medium term.

<sup>10</sup> The PIP category now includes the flows of the Recovery and Resilience Fund for 2021 and 2022



The turbulence in the international banking system that began in the United States and Switzerland in March, the slowdown in economic activity, and rising borrowing costs pose challenges to the domestic financial system. After 11 years of loose monetary policy, the ECB has raised key interest rates six times since mid-2022, cumulatively by 350 basis points, of which 100 basis points in the first quarter of 2023. As inflation expectations gradually ease, markets anticipate a slight further increase in the cost of money over the course of 2023. In addition to the interest rate increases, with regard to quantitative easing tools, the ECB completed net new purchases under the emergency purchase programme PEPP and APP in 2022, yet it continues to reinvest the maturing bonds.

The gradual decline in inflation, softer international prices for energy goods, and the “opening” of China’s economy improved the investment climate in financial markets in the first two months of 2023, with the Greek stock market and the financial sector gaining ground and the transaction volumes receiving a boost. However, the failure of three US banks in March 2023, coupled with the Swiss Confederation’s intervention for the UBS to buy the systemically large for Europe Credit Suisse, caused turmoil and a decline in valuations internationally, especially in the banking sector, thus also affecting domestic bank valuations. Thus, the bank index at the end of March traded around 18% lower than at the end of February, but 18% higher than at the end of 2022.

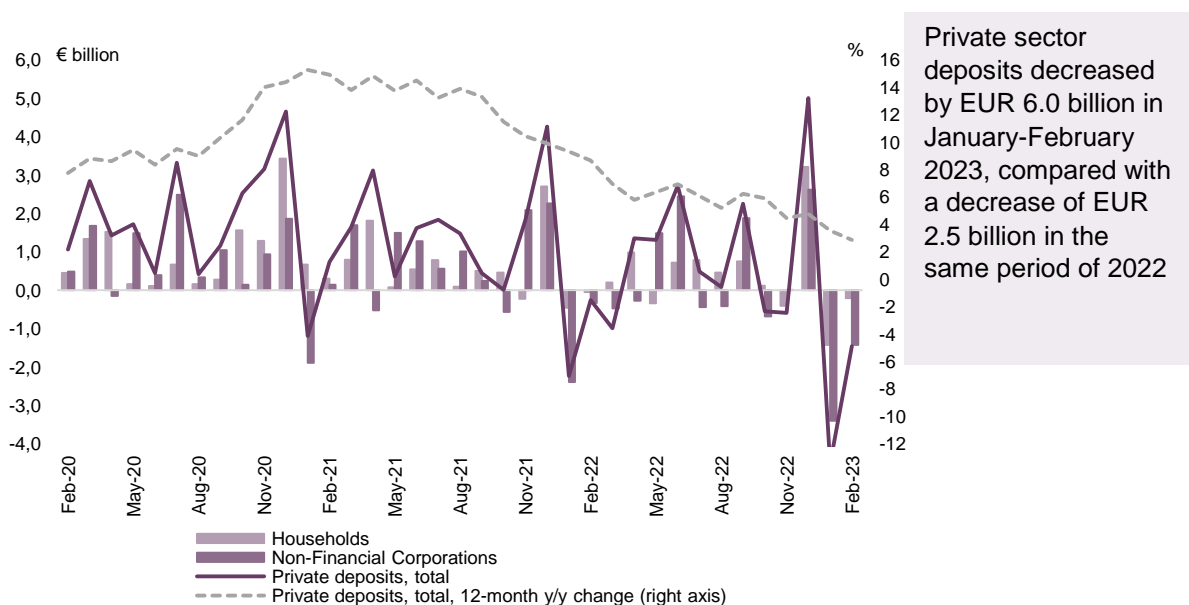
Uncertainty about the degree and duration of the real economy’s slowdown is affecting the outlook for the financial sector, including in terms of asset quality and profitability prospects. Challenges from the past include the high share of Non-Performing Loans (NPLs) in the economy and a high share of deferred taxation in equity. New challenges arising from the current conditions include a deterioration in the ability of floating-rate borrowers to repay and an increase in the use of long-term funding tools from the Eurosystem by the banks.

Among the positive trends in banks’ fundamentals, credit to firms continues to grow, while the NPLs on banks’ balance sheets keep falling. At the same time, the implementation of the loan arm of the National Recovery and Resilience Plan is ongoing, while an application for the loan arm of the REPowerEU programme has been submitted, creating opportunities to further stimulate credit for productive investments.

Among the negative trends, growth in the cost of new private sector borrowing accelerated, the trend in private deposits reversed to negative, while the credit contraction to households continued unabated.

**Figure 2.7**

Monthly net flow of private deposits at Greek banks



Source: Bank of Greece

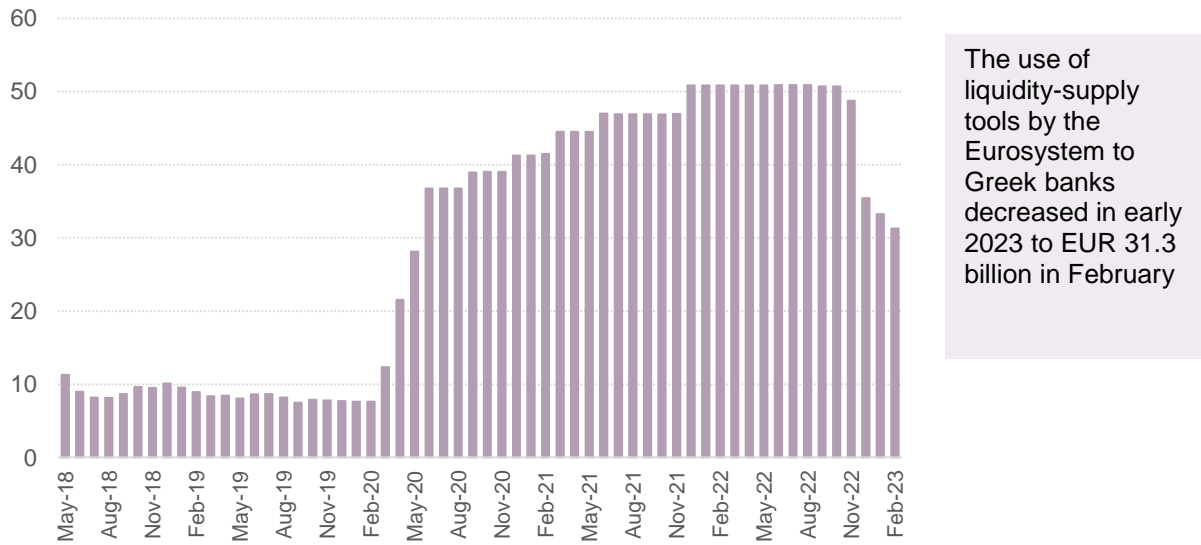
On the banks' liabilities side, private deposits decreased in the period December 2022-February 2023 by EUR 1.0 billion, of which EUR 2.6 billion outflows came from firms, partly offset by inflows of EUR 1.6 billion from households (Figure 2.7). Thus, the multi-month upward trend during the pandemic has reversed since the end of 2022. The 12-month rate of change weakened to 2.9% in February, compared with an average rate of 9.0% over the course of 2020-2021 and 4.8% in 2022, against the background of pandemic and expansion of savings.

For 2023, the fatigue in private deposits is expected to continue. As inflation becomes stagnant, fiscal constraints gradually constrain the amount of financial support measures, so real disposable income and household and corporate savings are expected to contract further.

The second part of banks' liabilities concerns Eurosystem funding. Low-cost long-term re-financing operations for banks (e.g. LTROs, PELTROs, TLTROs) provided significant liquidity to banks during the pandemic, which exceeded EUR 50.8 billion in mid-2022, at particularly low costs. The gradual increase in the cost of providing liquidity by the ECB after autumn 2022 led to a marked decline in their use by EUR 17.5 billion over the period December 2022-February 2023 (Figure 2.8). At the same time, domestic banking assets eligible by the Eurosystem as collateral for monetary policy operations, as reflected in the Bank of Greece's financial statements, declined over the same period, reaching of EUR 50.7 billion at the end of 2022. The third part of banks' liabilities concerns financing from the capital market.

**Figure 2.8**

Long-term financing of the Greek banks from the Eurosystem (billion €)



Source: Bank of Greece

On the assets side, the 12-month growth rate of credit to the domestic private sector remained at 5.6% in the period from December 2022 to February 2023. The rate for non-financial corporations (NFCs) remained at 10.7% over the same period (Figure 2.9). There was a negative change in credit to self-employed and sole proprietorships, at rates close to -1.4%, while the credit contraction to households strengthened, with an annual rate of change of around 2.5% (Table 2.11).

**Table 2.11**

Domestic bank financing and average interest rates per portfolio

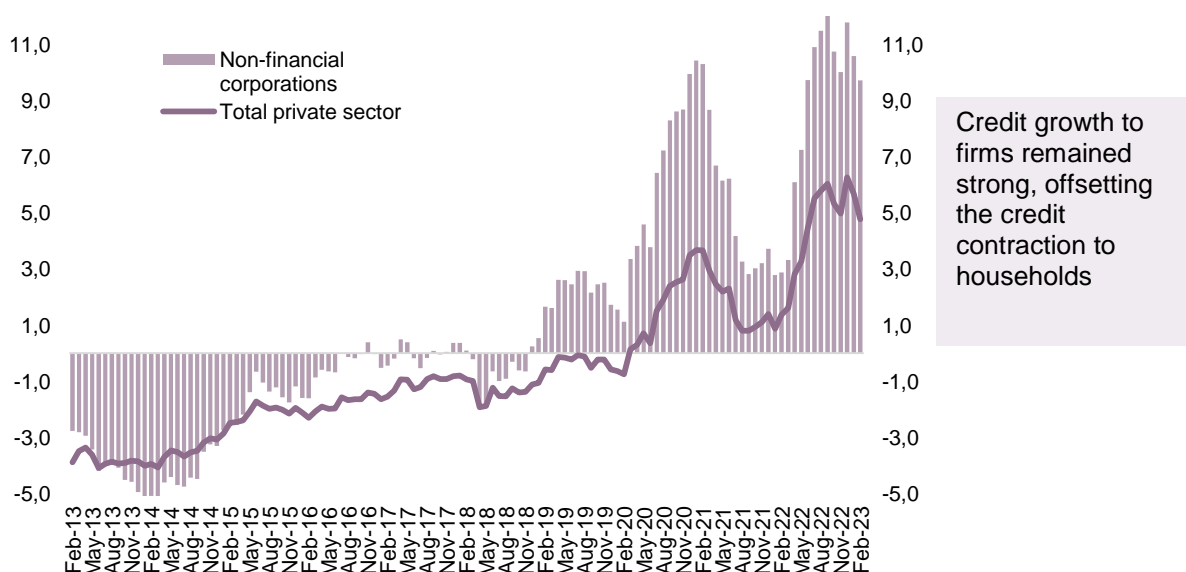
Quarter/Year	1/22	2/22	3/22	4/22	Jan.23	Feb.23
Annual % change of 12-month flows*						
Total private sector	1.3	3.5	5.8	5.5	5.7	4.8
Households & NPIs	-2.2	-2.1	-2.2	-2.3	-2.4	-2.5
Consumer credit	0.0	0.7	1.1	1.0	1.7	1.6
Mortgage credit	-2.9	-3.0	-3.1	-3.2	-3.6	-3.6
Sole proprietors and unincorporated partnerships	0.9	0.6	0.6	0.0	-1.4	-2.0
Non-financial corporations	3.0	7.7	11.6	10.9	10.6	9.7
Interest rates on new loans (period average, %)						
Consumer credit	10.5	10.3	10.6	10.7	10.7	10.8
Mortgage credit	2.83	2.95	3.17	3.60	3.73	3.78
Loans to non-financial corporations	2.88	3.22	3.29	4.43	5.03	5.35

Source: Bank of Greece.

\* The flows result from changes of outstanding balances corrected for loan write-offs, re-evaluation of securities, foreign exchange differences and reclassification/transfer of loans.

**Figure 2.9**

Bank financing of the domestic private sector 2012-2022 (annual % change of 12-month flows\*)



Source: Bank of Greece

\* Flows after correcting for write-offs, exchange rates and statistical reclassifications.

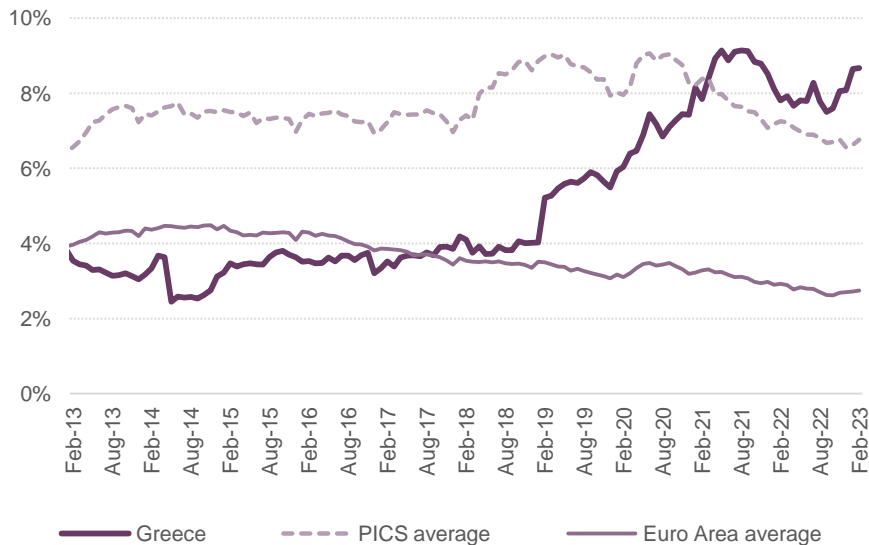
These trends in private sector financing contribute to both changes in supply and demand for loans, under the influence of the pandemic. On the supply side, the rapid reduction of NPLs and the acceleration of the implementation of the loan arm of the National Recovery and Resilience Plan "Greece 2.0" are positive for credit to NFCs. On the demand side, the new escalation of uncertainty acts as a deterrent to new investment, but is offset by projects already planned to be included in the recovery plan. The Bank of Greece's bank lending survey in the fourth quarter of 2022 recorded a strengthening in expectations of demand for new loans in consumer and business credit, especially for large firms and long-term loans, but a decline in demand for housing credit. Credit terms have remained unaltered and are not expected to change in the short term.



On the assets side, the banks strengthened their exposure to sovereign debt at the beginning of 2023, reaching EUR 27.8 billion in February 2023, or 8.7% of their total assets. Thus, the share of total assets of Greek banks placed in government bonds is slightly higher than that of the rest of the euro area's "south" countries, but significantly higher than the share for the euro area average (Figure 2.10).

**Figure 2.10**

Banks' government bond holdings over total assets (%)



The relative exposure of Greek banks to government bonds increased slightly in early 2023, above the euro area average

Source: ECB

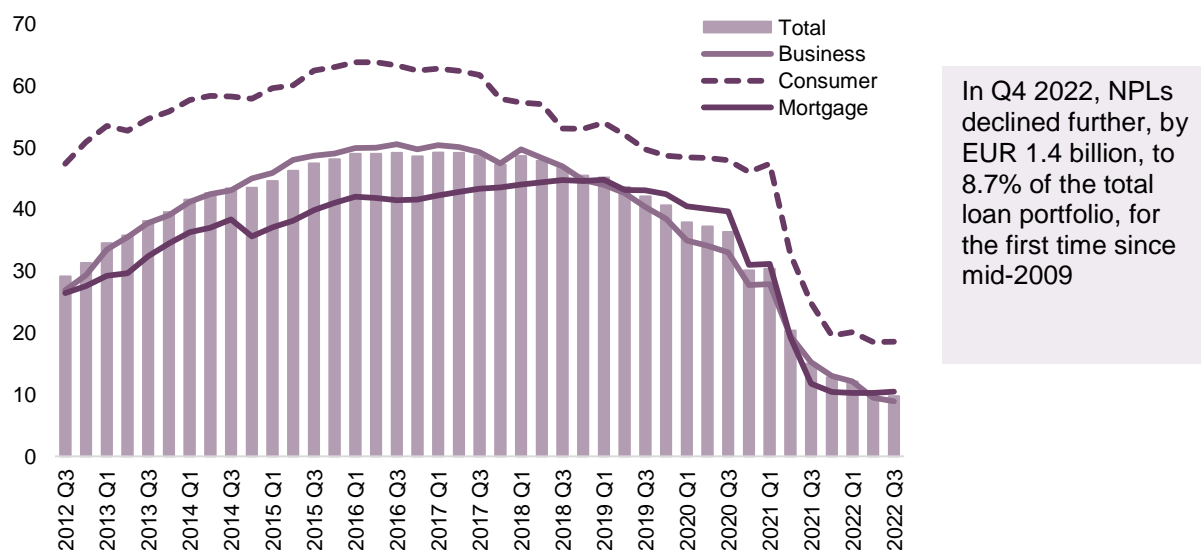
The non-performing loans (NPLs) decreased further slightly in the fourth quarter of 2022, by 1.0 pp or EUR 1.4 billion, declining in December 2022 to 8.7% of total loans (to EUR 13.2 billion), for the first time since mid-2009. The overall level of NPLs remains higher than in other European countries, where it is at low single-digit rates. In business credit, the share of NPLs decreased in the fourth quarter of 2022 to 7.6%, from 8.9% in the previous quarter, while in consumer loans it decreased from 18.5% to 18.1%. By contrast, housing loans recorded a marginal increase in the NPL ratio, from 10.4% to 10.5%.





Figure 2.11

Non-Performing Loans, % of total loans by category\*



Source: Bank of Greece

\* On-balance sheet loans (before provisions) for all Greek banks on a non-consolidated level.

The Hercules securitisation programme, with State guarantees implemented in the period 2020-2022, contributed to the reduction of the NPL stock by EUR 55.3 billion or 32.0 pp. However, the stock of non-performing private debt, both on and off-balance sheets of the banking system, remains high, with negative effects on the efficient allocation of economic resources and the prospects for economic recovery. For this reason, the successful implementation of reforms in relation to the bankruptcy code and the out-of-court debt settlement mechanism is of high importance.

In the medium term, the decline in NPLs is expected to lose steam due to the lower base after the end of the Hercules securitisation programme. The risk of new NPLs in individual portfolios, such as housing, is also visible, following the rise in interest rates on floating-rate loans. In this context, a policy initiative in coordination with banks was announced in April, according to which increases in variable mortgage rates that meet certain conditions have been frozen for about one year.

As regards new credit, the credit to households is expected to continue to contract, while the implementation of the loan arm of the National Recovery and Resilience Plan (total of EUR 12.7 billion for Greece by 2026) as well as REPowerEU (total EUR 5.0 billion for Greece by 2026) are expected to keep corporate credit growth elevated in 2023. Greece was the third in a row European country to meet the milestones of the first tranche. It received a total of EUR 3.6 billion in April 2022. It was also the 5th in a row European country to apply for the second tranche of equal size, which was disbursed in January 2023, while the assessment of the country's recent request in relation to the financial envelope under REPowerEU by the European Commission is not expected before the summer.

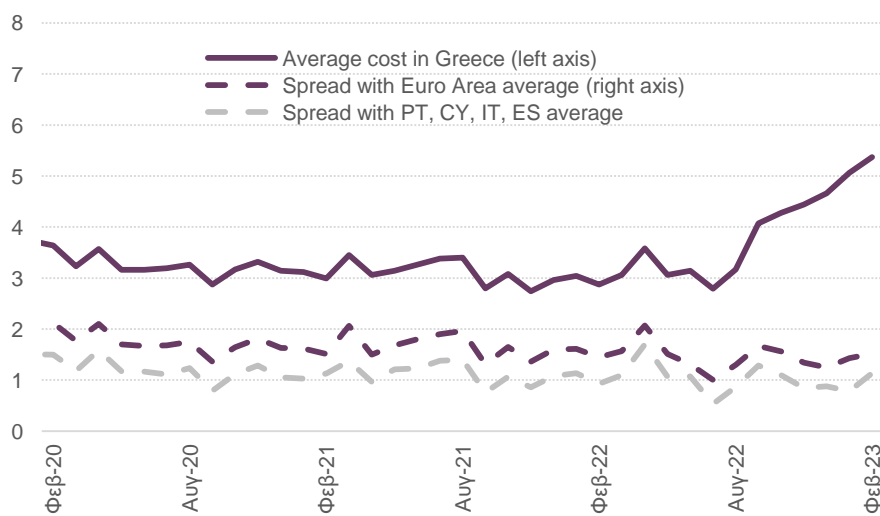
Interest rates on new deposits remained very low in January-February 2023, at 0.19% and 0.16% for non-financial corporations (NFCs) and households respectively. In the same two months, the average new lending rate increased significantly to 5.5%, reaching around 5.7% for individuals, 6.9% for freelancers, and 5.2% for NFCs. The spread of the average interest rate on loans and deposits (interest margin) increased further to 5.4% in February, compared with 3.8% and 4.2% for the whole of 2021 and 2022 respectively.



The average cost of new bank financing of private sector NFCs increased to 5.4% in February (Figure 2.12). At the same time, the cost of financing Greek businesses is higher than in other euro-area countries. Indicatively, according to the ECB's weighted bank borrowing cost index, the cost for non-financial corporations in February 2023 stood at 3.9% in the euro area, 4.0% in Germany, and 4.2% in the countries of the "south" of the Eurozone (Portugal, Italy, Cyprus, Spain). Subsequently, the spread of borrowing costs for Greek businesses in relation to the Eurozone and the "south" averages reached 136 bps and 114 bps respectively. Comparing it to the level before the 2010 debt crisis, the spread of borrowing costs for Greek enterprises compared to the average of the other countries of the euro area, remains significantly higher.

**Figure 2.12**

Composite cost of borrowing for non-financial corporations (%)



Interest rates for new private sector borrowing rose to 5.4% in February, with the spread from the average borrowing costs in the euro area's southern countries at 114 bps.

Source: ECB

Greek government bond yields stabilised in early 2023 at levels above 4%, albeit slightly below the 5-year highs of nearly 5% recorded in October, due to the negative impact of uncertainty caused by the energy crisis, inflation, and geopolitical instability. Thus, for the 10-year security, the yield averaged 4.3% in February (Figure 2.13). The spread of the cost of the new 10-year Greek government borrowing relative to the rest of the euro area countries declined slightly earlier this year. In February, it stood at 189 bps and 50 bps compared to the German bond and the average of the euro area's "south" countries, respectively, from 235 bps and 87 bps in 2022 as a whole. Spreads remain significantly higher than their average values in the first decade of the country's accession to the Eurozone (54 bps and 2 bps respectively).

In the context of the Greek government's financing strategy, in 2021 and 2022, a total of EUR 14 billion and EUR 8.3 billion were drawn from the long-term bond markets, while in 2023 the target of the PDMA is to raise around EUR 7.0 billion. The issuance of a new 10-year bond was completed in mid-January 2023, with the Greek government raising EUR 3.5 billion, of which 78% was absorbed by international investors, at an interest rate of 4.27%. A new 5-year bond was issued in late March 2023, with the Greek government raising EUR 2.5 billion at an interest rate of 3.92%.

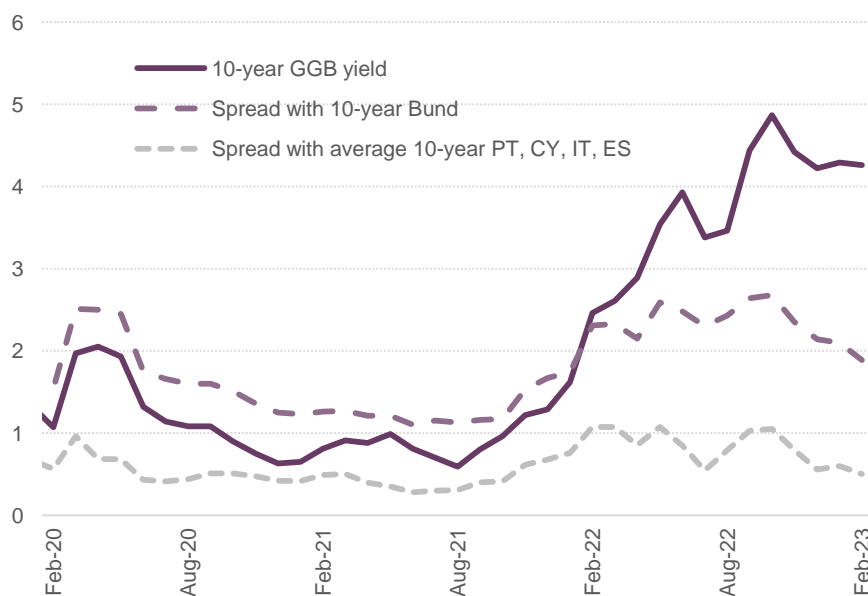
Economic and geopolitical shocks in the international environment in 2022 led to an increase in government bond yields internationally. The Greek securities have not yet been able to recover the intended "investment grade" from the international rating agencies, with four of them (S&P, Scope DBRS, R&I) assessing the Greek State one notch below this grade, with a change likely within the second half of 2023. It is noted that 18 quarters have elapsed since the end of the Greek adjustment programme, while Cyprus and Portugal recovered the investment grade from at least one international firm 11 and 13 quarters after the end of their respective programmes (Text box 2.2). The level of



Greek public debt remains among the largest in the world as a percentage of GDP (178.2% in the third quarter of 2022, as presented in the Annex). This quantitative feature is offset to some extent by its qualitative characteristics, such as high average repayment maturity and high ratio of debt at a fixed and low interest rate to international organisations.

**Figure 2.13**

Yield and spread of the 10-year Greek sovereign bond (%)



The average yield on the 10-year government bond stood at 4.2% in February 2023, remaining at the same level as in the previous month, while the average spread fluctuated around 189 bps compared to the corresponding German bond

Source: ECB



Box of section 2.2

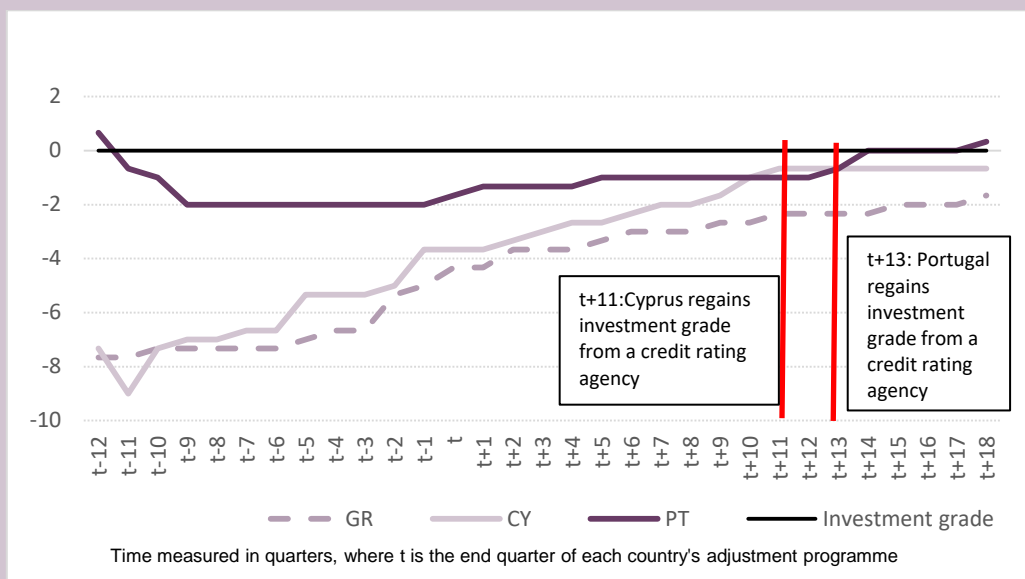
Recovery of investment grade after the end of support programmes in southern euro area countries

The credit assessment of a borrower at an “investment grade” by international rating agencies means recognition of a relatively low credit risk of the borrower, which is expressed through a rating at a grade above a certain level. Following a deterioration in the fundamentals of the Greek economy and a challenge to the reliability of official statistics, the Greek state lost its investment grade in 2010, initially by one international rating agency, for the rest to follow in a short period of time. The cost of new borrowing by the Greek government soared to particularly high levels during the debt crisis and remained at particularly high levels for about a decade.

The time the Greek government bond spent without an investment grade exceeded the duration of the remaining euro area countries that faced an economic crisis, which is related to the prolonged duration of the three successive adjustment programmes. Cyprus and Portugal remained without an investment grade for more than 6 years and recovered it within 3 and 4 years respectively after the end of their programmes (Figure B2.2.1). The year 2023 is the fifth year since the end of the last Greek programme.

**Figure P2.2.1. Sovereign credit rating by country:**

**Number of notches above/below investment grade per quarter, where t is the end quarter of each country’s adjustment programme\***



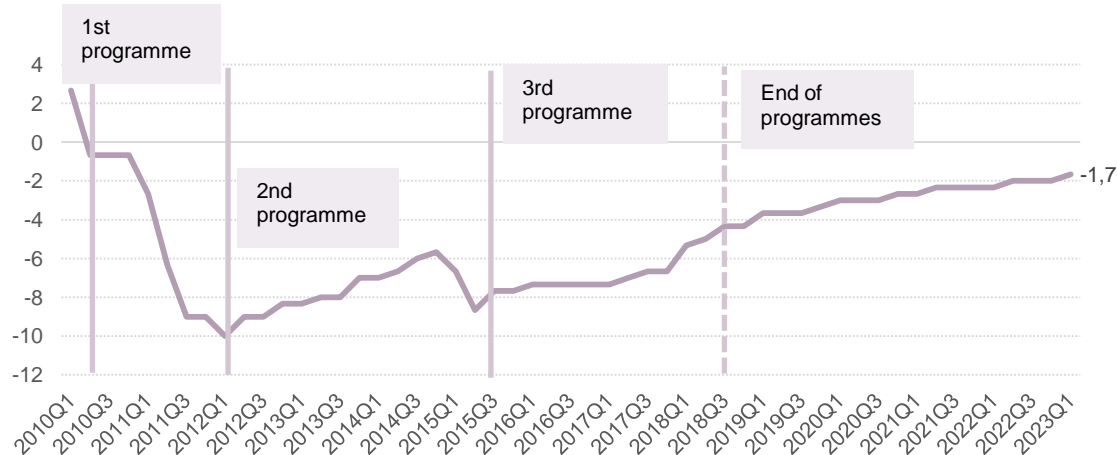
Source: International rating agencies. Data processing: IOBE

\*Note: Arithmetic average rating from three international agencies, S&P, Moody's, Fitch.

Following the economic adjustment programmes, since 2012 there has been a gradual improvement in the credit assessment of Greece, with the exception of the period of extreme uncertainty in 2015. However, the current rating of the Greek state is 1 to 3 notches short of the investment grade, depending on the rating agency (Figure B2.2.1).

The factors taken into account by rating agencies are structural, macroeconomic, fiscal, and the external balance. They focus on assessments of the economy’s recovery prospects in the short and medium term while taking into account recent economic performance. Uncertainty about the course of an economy is delaying the acquisition of an investment grade.

**Figure B2.2.2. Credit rating of Greek government bonds: Number of notches above/below investment grade\***



Source: International rating agencies. Data processing: IOBE

\*Note: Arithmetic average rating from three international agencies, S&P, Moody's, Fitch.

It is crucial for the Greek economy to achieve investment grade as soon as possible. Given the progress in its fundamentals, to the extent that a new government is formed within a reasonably short period of time in order to pursue economic policy with a medium-term horizon of targets and reforms, the market expectation is that the investment grade can be acquired in 2023. With an investment grade, the Greek bonds become eligible for investment by large international, institutional, and long-term investors, significantly increasing liquidity in the primary and secondary markets. Greek debt securities could then be used as collateral against interbank lending. Greek government and corporate bonds would also be eligible under ECB quantitative easing policies, in terms comparable to other Eurosystem members, without the need for a special waiver. Finally, it is a more general market signal, boosting expectations and leading to a broadening of the investment base and a de-escalation of public and private financing costs. Overall, the investment grade is a condition for the necessary significant increase in investment in order to systematically put the Greek economy on the path of strong growth.





## 3 PERFORMANCE AND OUTLOOK

### 3.1 GDP components

#### A. Recent developments

- With the acceleration of economic growth in the fourth quarter of 2022, the annual growth rate for 2022 is estimated at 6.1%, driven by investment (+21.8% y-o-y) and consumption (+5.6% y-o-y).
- Negative developments for 2022 include a widening of the current account deficit by 2.9 pp. of GDP, with imports increasing (+10.9% y-o-y) by about twice as much as exports (+4.9% y-o-y).
- However, the degree of openness of the Greek economy remained at a record level of 82% in 2022.
- In the fourth quarter of the previous year, annual GDP growth stood at +5.2%, down from +4.4% in Q3 2022 (+1.4% q-o-q).
- The largest contribution to growth was made by investment (+36.6% y-o-y), due to the expansion of fixed capital investments (+14.8% y-o-y) and the significant increase in stocks (+120.6% y-o-y).
- Private consumption continued to grow, albeit by a declining rate (+4.2% y-o-y), while public consumption contracted by -1.9%, compared with -2.8% in the previous quarter.
- GDP growth was hampered by an annual increase in imports of +7.5%, due to the annual expansion of both imports of services (+12.9%) and imports of goods (+ 4.8 %).
- By contrast, exports continued to decline for another quarter, by -3.5% annually as in the previous quarter, resulting in a significant deterioration in the external deficit, which in national accounting terms, rose year on year by around EUR 2243 million or 4.3 pp. of quarterly GDP.

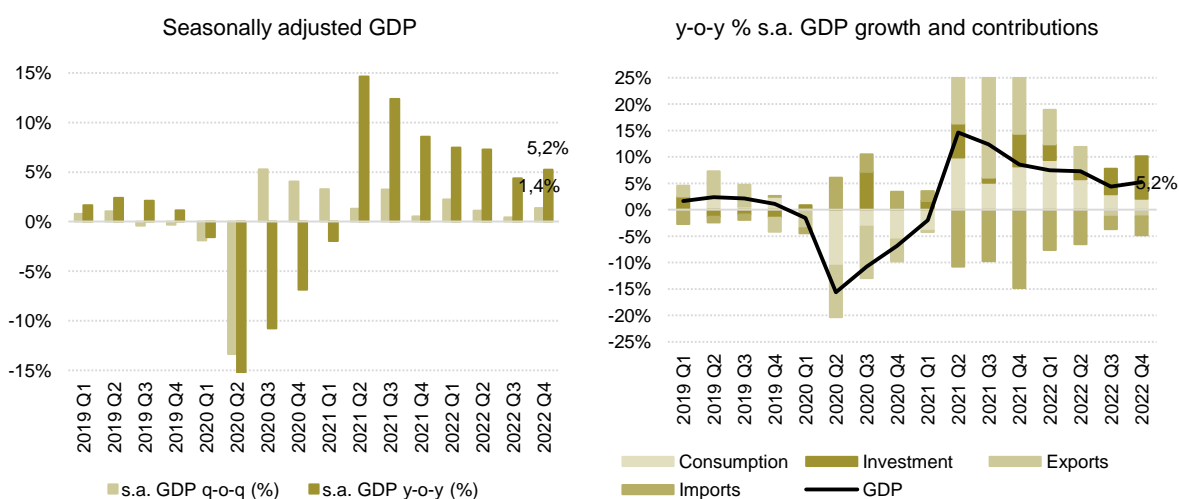
## Recent macroeconomic developments in Greece

Following the recovery of the Greek economy in the fourth quarter of last year, the annual growth rate is estimated at 6.1% (seasonally adjusted data) for 2022, significantly exceeding for the second consecutive year the euro area average (+3.5%) and driving GDP higher than its pre-pandemic level by around 4.5%. Last year's strong growth rate, higher than forecasts by domestic and international organisations, was primarily driven by private consumption (+7.9%) and investment (+21.8%). Negative developments for 2022 include the widening current account deficit (-9.7% as a percentage of GDP), with imports (+10.9%) increasing by about twice as much as exports (+4.9%).

Focusing on the 4th quarter of 2022, the Greek economy had a stronger annual recovery of +5.2%, compared with +4.4% a quarter earlier, driven primarily by a significant boost in investment (+36.6% y-o-y), as well as by households' inflation-resistant consumption (+4.2% y-o-y). The expansion of the annual growth rate of imports (+7.5%), together with a decline in exports (-3.5%) for the second consecutive quarter, had a negative effect on the growth rate (Figure 3.1).

**Figure 3.1**

Evolution of GDP and the contribution of its components



Source: ELSTAT, Data processing  
IOBE

### Investment is the main driver of recovery in Q4 2022

Looking at the precise developments in the components of GDP in the fourth quarter of last year, the annual growth rate of domestic consumption declined to +2.4%, from +3.3% a quarter earlier, mainly due to a gradual normalisation of the low base effect from 2021, when pandemic restrictions were still in place. In the consumption components, private consumption proved to be particularly resilient to inflationary pressures and continued to grow, albeit at a declining pace, by +4.2% (y-o-y) against +5.6% (y-o-y) in the third quarter of 2022. By contrast, government consumption declined in all quarters of the previous year, falling year-on-year by -1.9% in the final quarter, compared with -2.8% a quarter earlier. In 2022 as a whole, private consumption increased by +7.9% amid growth in employment, accumulated savings, and fiscal support, increasing its share of GDP and being the main driver of growth for the previous year.

Investment also showed a strong momentum throughout 2022, driven by the credit expansion of private banks, as well as the resources made available by the EU Recovery and Resilience Facility (RRF) in 2022. In 2022 as a whole, investment expanded by +21.8%, the highest rate in 13 years, with fixed capital formation, supported mainly by higher construction activity and stronger investment in





transport equipment, up by +11.6%. In Q4 2022, total investment increased year-on-year by +36.6%, from +24.6% in the previous quarter, with a large annual increase in inventories of +120.6% and fixed capital formation by +14.8%, from +90.1% and +8.3% respectively in the previous quarter.

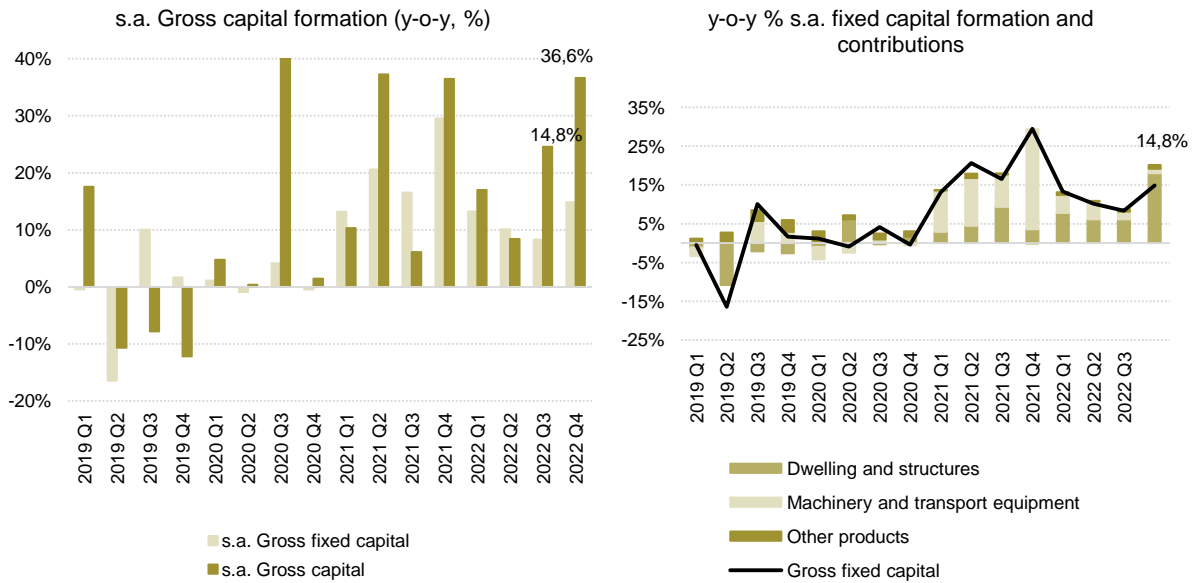
All the main investment categories contributed positively to the increase in fixed capital formation throughout 2022, with the highest contribution coming from dwellings and construction (+24.6%), with investment in machinery and transport equipment (+6.7%) and other products (+3.8%) coming next. In particular, in the fourth quarter of last year, the residential and construction sector recorded a double-digit growth for yet another quarter, significantly higher compared to the other sectors (machinery and transport equipment +2.5% and other products +6.2%), with an annual increase of +44.5% (Figure 3.2). In the individual categories of fixed capital investment, residential investment increased by +117.4%, compared to just +10% a quarter earlier. Investment in transport equipment followed in intensity (+84% y-o-y), while investment in mechanical equipment-weapons decreased annually by -4.3%, in the wake of growth in the previous three quarters. Investment in technology equipment also decreased annually by -26.5%, the same percentage as in the previous quarter. Also significant was the strengthening of investment in other constructions, which reached +19.9% in the fourth quarter, maintaining double-digit rates throughout 2022. Finally, higher than in the previous quarter annual growth was recorded by investment in other and agricultural products, by +6.2% and +6.5% respectively, from +3.4% and +2.1% in the previous quarter.

These positive developments offset the strong negative impact of net exports, namely the significant and worrying deterioration of the deficit in the goods account, which was only partially offset by the surplus of services. Overall, the annual increase in total imports in 2022 (+10.2%) was more than double the corresponding increase in exports (+4.9%), with the trade deficit as a percentage of GDP standing at -7.4 %.

In Q4 2022, total imports increased by +7.5%, compared with +5.3% in the previous quarter, mainly due to a significant annual increase in imports of services by +12.9% (-5.2% in the previous quarter), and despite a slowdown in the growth rate of imports of goods to +4.8%, from +8.2% in Q3 2022. By contrast, exports continued their downward trend for another quarter, showing an annual decline of -3.5%, similar in size to the previous quarter, resulting in a significant deterioration in the external deficit, which in national accounting terms, rose from a year ago by around EUR 2,243 million or 4.27 pp. of quarterly GDP. It is also worth noting that exports of services, which were one of the main drivers of growth in the first two quarters of 2022, fell annually by -5.1% in the fourth quarter of the year, while exports of goods decreased by -3.3%. The weak export performance appears to be mainly the result of a higher base of comparison, after the gradual lifting of containment measures introduced in response to the pandemic in the second half of 2021, as well as the contraction in economic activity in the euro area. Also, as mentioned in the previous quarterly report, exports may be underestimated due to the application of a very high deflator, considering that tourist arrivals, which are the main component of export services, recorded an annual increase of +90% in 2022. However, it is worth noting as an important development the strengthening of the openness of the Greek economy in 2022, with the combined exports and imports relative to GDP reaching very high levels (82%), despite a slight decline at the end of last year (a more extensive analysis of the evolution of the openness of the Greek economy is presented in Box 3.1). In particular, the increase in exports of goods in recent years, coupled with the gradual strengthening of manufacturing sectors, is a major positive trend for the Greek economy.

### Figure 3.2

Evolution of investment and the contribution of its components



Source: ELSTAT, Data processing IOBE

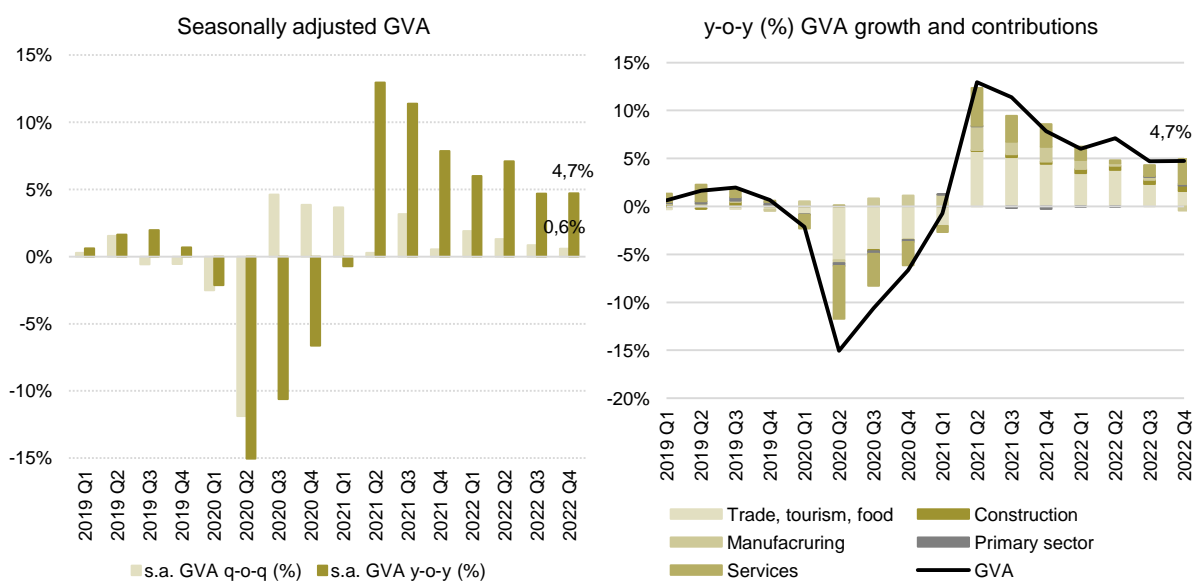
Increase of the growth rate of investment to its highest level in 13 years. Significantly stronger investment in housing and construction.

On the production side, domestic gross value added (GVA) in Q4 2022 increased by +4.4%, slightly milder than GDP, due to the smaller size of energy subsidies, which are counted as GVA but are not domestic production. In particular, the annual rate of change in subsidies stood at +32.9% in the fourth quarter, compared with +127.5% in the previous quarter, while taxes increased annually by +6.8% from +3.6% in Q3 2022.



Figure 3.3

Evolution of GVA and the contribution of its components



Source: ELSTAT, Data processing  
IOBE

After the slowdown in tourism, transport, and trade, other services made the largest contribution to GVA growth.

At the sectoral level, following the slowdown in the growth rate of tourism, transport, and trade (wholesale and retail) in the final quarter of 2022, other services made the largest contribution to GVA growth. Construction and the primary sector maintained their upward trend and their small contribution to GVA growth, while the Industry sector contracted for the first time since the pandemic (Figure 3.3).

In detail, in the individual sectors of production, in the fourth quarter of 2022, eight of the ten main sectors of the Greek economy recorded an annual expansion of their activity. In particular, in the services sector, which had the strongest contribution to the expansion of the GVA, the highest annual increase was recorded in financial-insurance by +29.6%, which had declined in the first half of the previous year (-9.4% and -9.8% in the first and second quarters respectively). The second best annual performance was recorded in professional-scientific-technical-administrative activities (+17.6% from +13% in Q3), with information-communication (+12.9% from +4.1% in Q3) and arts-recreation-entertainment (+10.7% from +18.2% in Q3) coming next. After the end of the tourist season, the momentum of trade-tourism-transport-food services weakened, with the sector's annual growth rate in the final quarter of the year falling to +7.4% from +10.8% a quarter earlier. Finally, in the services sector, real estate management recorded an anaemic annual increase of +0.4%, while a small annual recession of -0.6% (compared to -0.9% in the previous quarter) was posted by public administration-defence-compulsory social security. In the remaining sectors, construction maintained its strong momentum, with its activities growing annually by +24.8%, up from +19.3% in the previous quarter. The primary sector also grew year-on-year (+4.8%), twice as high as in the previous quarter. By contrast, industry contracted annually by -3.2%, down from +2.1% in Q3 2022. In 2022 as a whole, construction recorded the largest increase (+21.5%), followed by tourism, transport, and trade (wholesale and retail) (+12.8%), other services (+3.0%), industry (+1.6%), and the primary sector (+1.3).

To sum up, the Greek economy recorded high growth rates in all quarters of 2022, driven by consumption and investment. In particular, the acceleration of the upward path of GDP in the fourth



quarter of 2022 will lead to higher growth rates in 2023 than initially anticipated (carry-over effect). Despite positive developments, the widening current account deficit remains a significant weakness in the domestic economy.

**Table 3.1**

Trends in key macroeconomic figures – National Accounts (seasonally adjusted data, 2015 constant prices), provisional data

Quarter	GDP		Final Consumption		Investment		Exports		Imports	
	million €	Annual rate of change	million €	Annual rate of change	million €	Annual rate of change	million €	Annual rate of change	million €	Annual rate of change
<b>2012</b>	<b>180415</b>	<b>-7,2%</b>	<b>163406</b>	<b>-7,0%</b>	<b>20239</b>	<b>-21,0%</b>	<b>48968</b>	<b>2,0%</b>	<b>52826</b>	<b>-5,7%</b>
<b>2013</b>	<b>175943</b>	<b>-2,5%</b>	<b>156852</b>	<b>-4,0%</b>	<b>19586</b>	<b>-3,2%</b>	<b>49843</b>	<b>1,8%</b>	<b>50644</b>	<b>-4,1%</b>
<b>2014</b>	<b>176956</b>	<b>0,6%</b>	<b>156608</b>	<b>-0,2%</b>	<b>20438</b>	<b>4,4%</b>	<b>53954</b>	<b>8,2%</b>	<b>54069</b>	<b>6,8%</b>
<b>2015</b>	<b>176425</b>	<b>-0,3%</b>	<b>156682</b>	<b>0,0%</b>	<b>21398</b>	<b>4,7%</b>	<b>56661</b>	<b>5,0%</b>	<b>58320</b>	<b>7,9%</b>
<b>2016</b>	<b>175582</b>	<b>-0,5%</b>	<b>156054</b>	<b>-0,4%</b>	<b>22794</b>	<b>6,5%</b>	<b>56426</b>	<b>-0,4%</b>	<b>59929</b>	<b>2,8%</b>
<b>2017</b>	<b>177441</b>	<b>1,1%</b>	<b>158855</b>	<b>1,8%</b>	<b>21652</b>	<b>-5,0%</b>	<b>61229</b>	<b>8,5%</b>	<b>64474</b>	<b>7,6%</b>
2018 Q1	44887	1,8%	40335	2,5%	5154	-11,5%	16242	9,4%	16534	4,7%
2018 Q2	45032	1,7%	39689	0,1%	6237	16,7%	16496	7,8%	17217	8,4%
2018 Q3	44976	0,5%	39839	0,1%	5490	-0,6%	16612	7,0%	17755	8,9%
2018 Q4	45281	2,2%	39833	-0,5%	6439	29,7%	17462	12,2%	17671	7,1%
<b>2018</b>	<b>180176</b>	<b>1,5%</b>	<b>159697</b>	<b>0,5%</b>	<b>23319</b>	<b>7,7%</b>	<b>66812</b>	<b>9,1%</b>	<b>69177</b>	<b>7,3%</b>
2019 Q1	45639	1,7%	40429	0,2%	6058	17,6%	17124	5,4%	17699	7,0%
2019 Q2	46120	2,4%	40816	2,8%	5573	-10,7%	18459	11,9%	17711	2,9%
2019 Q3	45930	2,1%	40116	0,7%	5060	-7,8%	18340	10,4%	18215	2,6%
2019 Q4	45793	1,1%	40912	2,7%	5655	-12,2%	16153	-7,5%	17566	-0,6%
<b>2019</b>	<b>183482</b>	<b>1,8%</b>	<b>162272</b>	<b>1,6%</b>	<b>22347</b>	<b>-4,2%</b>	<b>70076</b>	<b>4,9%</b>	<b>71190</b>	<b>2,9%</b>
2020 Q1	44931	-1,6%	40524	0,2%	6348	4,8%	15371	-10,2%	18128	2,4%
2020 Q2	38929	-15,6%	36154	-11,4%	5596	0,4%	13106	-29,0%	14929	-15,7%
2020 Q3	40988	-10,8%	38774	-3,3%	7143	41,2%	12419	-32,3%	16737	-8,1%
2020 Q4	42654	-6,9%	38367	-6,2%	5736	1,4%	14100	-12,7%	16062	-8,6%
<b>2020</b>	<b>167502</b>	<b>-8,7%</b>	<b>153819</b>	<b>-5,2%</b>	<b>24823</b>	<b>11,1%</b>	<b>54996</b>	<b>-21,5%</b>	<b>65856</b>	<b>-7,5%</b>
2021 Q1	44055	-1,9%	38687	-4,5%	7003	10,3%	15276	-0,6%	17252	-4,8%
2021 Q2	44626	14,6%	40140	11,0%	7681	37,3%	16414	25,2%	18751	25,6%
2021 Q3	46072	12,4%	40997	5,7%	7578	6,1%	18368	47,9%	20416	22,0%
2021 Q4	46314	8,6%	41854	9,1%	7829	36,5%	18194	29,0%	21252	32,3%
<b>2021</b>	<b>181066</b>	<b>8,1%</b>	<b>161678</b>	<b>5,1%</b>	<b>30091</b>	<b>21,2%</b>	<b>68252</b>	<b>24,1%</b>	<b>77670</b>	<b>17,9%</b>
2022 Q1	47348	7,5%	42733	10,5%	8195	17,0%	17931	17,4%	20304	17,7%
2022 Q2	47873	7,3%	42732	6,5%	8327	8,4%	18405	12,1%	21488	14,6%
2022 Q3	48086	4,4%	42366	3,3%	9439	24,6%	17699	-3,6%	21488	5,3%
2022 Q4	48742	5,2%	42856	2,4%	10696	36,6%	17549	-3,5%	22850	7,5%
<b>2022</b>	<b>192049</b>	<b>6,1%</b>	<b>170687</b>	<b>5,6%</b>	<b>36657</b>	<b>21,8%</b>	<b>71584</b>	<b>4,9%</b>	<b>86130</b>	<b>10,9%</b>

\* provisional data

Source: Quarterly National Accounts, ELSTAT, March 2023

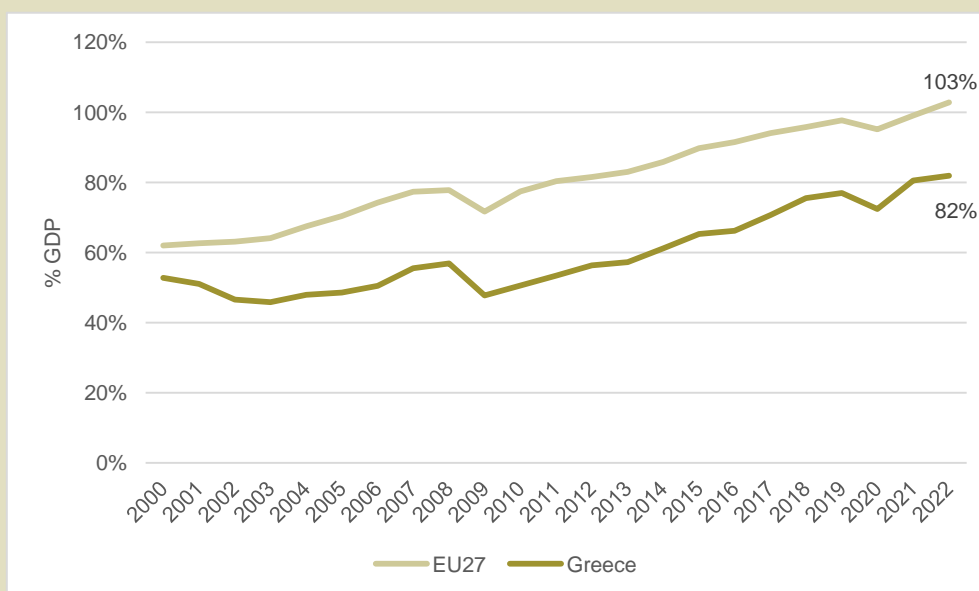


### Box of section 3.1

#### Economic openness index of Greece in 2022 and comparison with EU

The literature, empirical and theoretical, has highlighted a strong positive relationship between the degree of economic openness and the pace of its economic growth, as trade is the main means of disseminating new products and technologies.<sup>11</sup> After the first years of the creation of the Euro area and the gradual convergence of some of its member states' economies, there was a gradual increase in the openness of the economies of the European Union. In particular, the EU's average degree of openness, defined as the sum of exports and imports as a percentage of GDP, showed a significant upward trend, which was only temporarily halted by the financial crisis in 2007-2008 and the pandemic in 2020, reaching a record of 103% of GDP in 2022. Similar was the dynamic of the degree of openness of the domestic economy, which after the Greek debt crisis of 2009 began to gradually reduce its deviation from the European average, reaching a historic record of 82% in 2022.

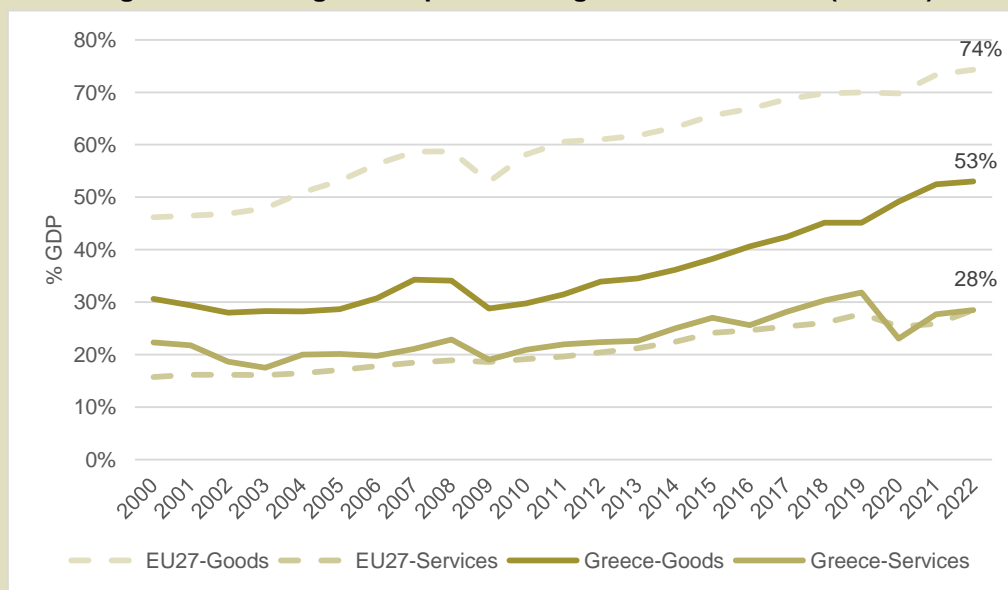
**Figure B3.1.1. Degree of openness (% GDP)**



Source: Eurostat (n.s.a., constant prices)

Both trade sectors (goods and services) contributed to the boost of the openness of the Greek economy. In particular, while the degree of openness of the services sector is in line with the European average over time, the degree of openness of the goods sector, having grown significantly over the last three years, reduced its deviation from the European average to 21 p.p. in 2022. It is worth noting, however, that 2022 saw a large deterioration of the deficit in the balance of goods, which was only partially offset by the surplus of services.

<sup>11</sup> However, studies focusing on trade restrictions and policies, such as import substitution policies implemented mainly in the 1980s, rather than on external volumes, have shown that their relationship with economic growth is complex and often ambiguous.

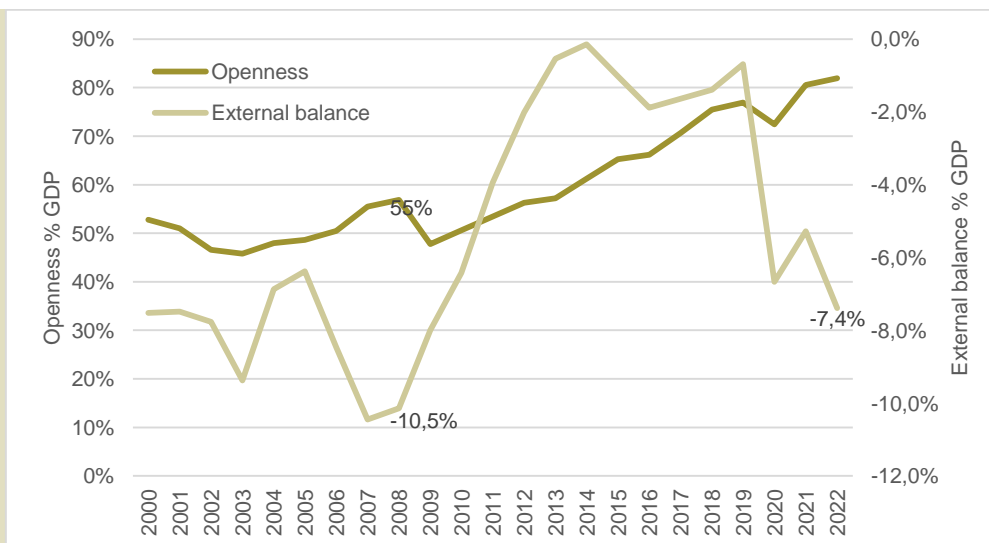
**Figure B3.1.2. Degree of openness of goods and services (% GDP)**


Source: Eurostat (n.s.a., constant prices)

While strengthening openness undoubtedly has a positive effect on the growth rate of an economy, when accompanied by expanding external deficits it may make the domestic economy vulnerable to external shocks, particularly when it participates in a monetary union, and therefore cannot control the exchange rate of its currency (as, in such a situation, currency depreciation would improve the external balance). In particular, in the case of Greece where imports have high elasticity with respect to consumption and the latter represents a large part of domestic output, the strengthening of the growth rate of the domestic economy leads to an increase in openness but also to a worsening of the external deficit. However, the large increase in openness observed over the past two years has led to smaller deficits compared to the lesser degree of openness and the larger external deficits observed in 2007-2008.

In relation to the contribution of higher trade volumes to growth, the “mixture” of the imports of goods, in terms of the shares of consumer, capital, and intermediate goods in total imports is also considered important. For example, a high share of intermediate goods, as in the case of Greece (the value of intermediate goods constituted 70% of the total value of imports of products in 2022), may have a positive impact on medium-term growth, as international trade leads to more efficient use of domestic resources through the import of goods and services that are otherwise too expensive to produce in the country (a more detailed description of the import components can be found in the Box 3.3). That said, the strengthening of intermediate goods shows the growing dependence of domestic production on imported goods, which proved to be particularly detrimental to the Greek economy over the past year, as “imported” inflation significantly increased business operating costs. Also, if trading partners differ significantly in their comparative advantages, such as in know-how or economies of scale, then trade liberalisation and economic integration, even if it increases global growth, can negatively affect individual countries.

**Figure Π3.1.3. Openness and external balance (% GDP)**



Source: Eurostat (n.s.a., constant prices)

To sum up, although the sign of the effect of the observed high openness of the Greek economy on the pace of economic growth is positive, the magnitude of the impact will depend on the domestic composition of economic growth. Thus, if the main driver of growth for the coming years is investment, outweighing consumption, and especially investment in growth sectors, then through trade relations and trade, our country will have expanding access to know-how of its trading partners, while the producers will have access to larger markets.



## B. Assumptions and forecasts

### Medium-term outlook

- The growth slowdown in the euro area, the slow easing of inflation, fiscal aggregates, the execution of the “Greece 2.0” plan, the elections, and the granting of investment grade, are the major drivers of GDP developments in 2023.
- An estimate of slower growth of 2.4% in 2023 because of declining global economic activity and persistent inflation and uncertainty.
- Milder growth rates of all GDP components than in 2022.
- Strong investment momentum maintained in 2023, with fixed investment growth strengthening especially in the second half, with the expected acquisition of investment grade.
- Marginal improvement in the external balance in 2023, with a slowdown in the growth of openness, an increase in the share of services in exports, and the share of goods in imports.
- An estimate of inflation at 4.3% and of unemployment at 11% for 2023.

Following the gradual decline in energy prices and a slowdown in inflation since the final quarter of last year, as well as the resilience shown by most world economies, the adverse forecasts for the 2023 economic growth have begun to be positively revised, while the risk of a recession in the euro area has now moved away. However, the continuation of the Russo-Ukrainian war, coupled with the slow easing of inflation and potential shocks in financial markets, retains uncertainty high and is expected to be the major driver of economic developments in 2023.

### Easing of energy prices – persistent core inflation

Domestic inflation continued its downward trend in February this year for the fifth month in a row, easing the erosion of household disposable income. However, as supply-side shocks and strong demand, amid rising employment and fiscal support, are still present, the easing of inflation is expected to be slow.

After the 27-year record rate of change in the domestic CPI, which reached 9.6% in 2022, in the first two months of 2023 it stood at 6.6%, with the HICP standing at 6.9%, significantly lower than that of the EA (8.6%), mainly due to extensive price restraint measures and lower dependence of the Greek economy on natural gas. With regard to the components of the HICP in 2023, it is of particular interest that its annual rise is mainly due to the positive contribution of domestic demand (the percentage change in the index with fixed taxes and excluding energy goods stood at 8.2% in the first two months of 2023), as most of the contribution to annual inflation is made by only three categories of non-energy goods and services: food and non-alcoholic beverages, hotels-coffee-restaurants and transport. In addition, the increase in the minimum wage and unemployment benefits, the continuation of fiscal measures to support households (e.g. income support measures for “vulnerable” social groups, the market pass, the household basket, etc.) and companies to mitigate energy costs, are expected to boost disposable income and reduce price elasticity. Finally, the upward trend in product and service prices as consumption recovers also suggests that the intensity of competition and the ability of production to respond in a timely manner are weak.

In terms of expected developments in global energy prices, the International Energy Agency revised up its forecasts for global oil demand in 2023, taking into account the strong growth of India and China. On oil supply, at its last meeting in early April, OPEC+, including Russia, decided to cut daily output as of next month, thus creating the conditions for possible new oil price increases. The average price of Brent oil in the first two months of this year stood at \$82.5/barrel, from \$91.7/barrel a year ago.





This year, the CPI disinflation is expected to strengthen further due to lower energy prices, an expected weakening of the explosive post-pandemic demand, interventionist policies of the ECB and the European Commission, and a higher base effect. According to forecasts announced by the European Commission last February, inflation in the EA in 2023 will be 5.6% (the ECB forecasts similar inflation in the magnitude of 5.3%), while for Greece it forecasts lower inflation of 4.5%. A more comprehensive analysis of the main drivers of inflation can be found in Section 3.5.

## **Slowdown in global economic activity in 2023**

The European and global economy, following strong growth after the end of the pandemic, is once again in a dangerous area, set mainly by high inflation and the sharp change in monetary policy, which is causing a sharp increase in the cost of financing.

The growth rate of most of the world's economies declined significantly over successive quarters of the previous year, with the OECD economies growing on average at an annual rate of 1.4% in the fourth quarter of 2022 (compared with 2.6% in the previous quarter), the major developed economies (G7) in the same quarter growing at an annual rate of 0.9% (compared with 1.9% in the previous quarter), while the euro area economy grew by 1.8% in the fourth quarter of 2022 (compared with 2.4% in the previous quarter). Overall, the rate of change in global GDP over the past year is estimated at 3.2% (more information on changes in the key macroeconomic fundamentals of EU countries and globally can be found in Sections 2.1.A and 2.1.B).

According to forecasts by international organisations for 2023, most global economies will continue to record positive, but lower than in the previous year, growth rates, which hits on critical aspects of our own economy such as exports and investment. For 2023, the OECD forecasts growth for the global economy of 2.6%, while the European Commission forecasts marginal growth for the euro area of 0.8%. By contrast, the economies of the United States, India, and China are expected to accelerate their growth.

## **Restrictive monetary policy due to persistent inflation**

Following the policy of channelling liquidity over an exceptionally large duration, scale, and breadth from central banks before, but especially during the pandemic, imbalances that were expected to result in some inflation have accumulated. With inflation remaining well above the long-term target of 2% and with an upward shift in inflation expectations, most Central Banks continue their restrictive monetary policy, which started in mid-2022. Specifically, the Fed raised its key interest rate by 25 basis points in February this year, to the range of 4.25% to 4.50%, with investors expecting a further increase in the coming months, as fears of an extensive banking crisis appear to be receding while inflation remains high.

In the euro area, the ECB already made two interest rate revisions in 2023, raising the key interest rates by 100 basis points overall. In its latest announcement, the ECB's Governing Council estimates that inflation will remain high for a long time, as even excluding energy and food prices, euro area inflation will continue to rise and is expected to average 4.6% in 2023, which is higher than projected in the December estimates.

On quantitative easing policies, namely the Asset Purchase Programme and the Pandemic Emergency Purchase Programme, the ECB decided to reduce the size of its portfolio as of early March 2023 by not reinvesting all principal payments from maturing securities. However, the pace of portfolio contraction will take place at a measured and predictable pace and will be systematically reviewed to ensure the ECB's control of short-term money market conditions and the orderly functioning of the banking system. It is worth noting that the value of securities purchased through these programmes increased annually by only 4.4% in 2022, while in 2021 it had increased by 25.6%. Finally, as private banks repay much of their lending after the completion of the third series of targeted long-term refinancing operations (TLTRO III) in June 2022, the ECB will continue to monitor the banks'



funding conditions to ensure a smooth transmission of central monetary policy. According to the Eurosystem balance sheet, loans to euro area credit institutions related to monetary policy operations decreased significantly by around -40% in 2022, compared with growth of 22% a year earlier.

The continuous rise in key interest rates significantly increases the cost of new borrowing, as well as the cost of servicing existing debt obligations, of all economic agents: households, businesses, and the state. Moreover, while the rise in key interest rates already appears to have been incorporated, albeit partially, into lending rates, deposit rates remain relatively low, with the ECB observing significant deposit outflows from European banks. In particular, deposits with euro-area banks fell by EUR 71.4 billion in February, the largest decline since data recording began in 1997, with household deposits falling by EUR 20.6 billion.

### **Successful execution of the state budget amid expansionary fiscal policy**

Fiscal policy in most EU and EA countries, following the activation in early 2020 of the general escape clause from the fiscal rules of the Stability and Growth Pact, was for most of 2022 expansionary, with the aim of mitigating the effects of high inflation and normalising economic activity. The Greek government, in line with European practices, since the beginning of last year has taken successive packages of measures, such as measures to support households and businesses in response to the energy crisis, measures to address the health crisis, a triple increase in the minimum wage, the abolition or significant reduction of taxes and social security contributions, as well as an increase in benefits.

Despite the significant expansionary fiscal policy of the Greek government, the execution of the 2022 state budget (SB) was better than the initial targets, as the burden on the budget balance in 2022 was mitigated by the higher-than-expected revenues due to four positive factors: economic growth, expansion of electronic payments, higher receipts from indirect taxes due to inflation and higher income tax revenues, due to the progressive scale. In the first two months of this year, the balance and the primary balance of the SB are in surplus and above the targets (more information on the implementation of the SB is presented in Section 2.2B).

However, the majority of fiscal interventions are expected to weaken in the second half of this year, as due to the expected milder recovery of the domestic economy, the fiscal space of the Greek government is more limited. Moreover, government support policies through subsidies, in addition to their negative impact on the fiscal balance, may have spill-over effects on consumption and tax compliance. Finally, fiscal discipline, in addition to being a necessary condition for the sustainability of Greek debt and reducing its financing costs, is now required following the recent announcement by the European Commission on the deactivation of the escape clause in 2024, as well as within a new framework of fiscal rules of the euro area states that is being developed, which may allow for greater flexibility in the level of government budget surpluses, through the implementation of reforms and structural measures, but also provides for the imposition of economic sanctions and suspension of EU funds in the event of non-compliance with the rules.

### **Downward trend of public debt and upward trend of private debt as percentage of GDP**

Despite the widening of the absolute level of government debt in 2022, due to new lending from government bonds and the disbursement of tranches of the RRF loan arm, the strong nominal performance of the Greek economy, coupled with positive fiscal developments, significantly reduced the debt-to-GDP ratio (estimated at 171.4% in 2022) and allowed for the early repayment of EUR 1.9 billion of IMF loans and EUR 2.7 billion of GLF loans (the bilateral loans of the first programme). The favourable projections for the generation of fiscal surpluses in the current as well as in the coming years are expected to allow for a further easing of the debt burden.



However, the upward trend in central government debt, which at the end of last December stood at EUR 400,28 billion, up by EUR 11.94 billion, compared with December 2021, surpassing by EUR 8 billion the target set by the Ministry of Finance just two months earlier in the 2023 Budget Introductory Report, is raising concerns. It is also characteristic that during that month, the Central Administration resorted to short-term borrowing through repos amounting to EUR 50 billion. It should be noted, however, that these figures relate to central government debt, or gross public debt as it is called, which differs from the general government debt. For the purpose of calculating the latter, which serves as the indicator for monitoring the fiscal performance of states, the so-called intra-government debt, which may arise from the borrowing of the Central Government, through government bonds and repos from social security funds, local authorities, and other public bodies, is deducted from the gross public debt.

The state guarantees to banks (Hercules programme), enterprises, individuals, and public bodies of close to EUR 30 billion is another source of concern in relation to the public debt. Here we should add that the repayment of the tranches of loans received by Greece from the European Financial Stability Facility (EFSF) begins this year, while in the following years begins the repayment of other loans that Greece received from the EU institutions (loans from the European Stability Mechanism (ESM), the European Investment Bank, etc.), amounting to approximately EUR 205 billion until 2070 (EUR 60 billion over the next decade). The additional expenditure for repayment of debt to the EU may require the generation of higher fiscal surpluses so that Greek debt unsustainability scenarios do not arise again.

This year, the Greek State has already made three capital market issues, in an effort to avoid a possible further increase in interest rates by the ECB, as well as a climate of uncertainty during the election period, thus covering around 90% of its issuance needs for 2023, as estimated by the Public Debt Management Agency (PDMA). The first issue took place on 17 January, with a 10-year bond, raising EUR 3.5 billion at an interest rate of 4.28%, the second issue took place on 22 February with six-month notes, raising EUR 812.5 million at an interest rate of 3.07%, while the third took place on 29 March with a 5-year bond, raising EUR 2.5 billion at an interest rate of 3.92%. The receipts from the last issue were added to the already high cash reserves of the Greek government, which amounted to EUR 35 billion (around 18% of GDP).

Regarding private debt, the trend was sharply upward according to data from the IAPR and the Ministry of Finance at the end of last year (EUR 406 billion in November 2022, of which more than half are classified as non-performing), despite a decrease in banks' non-performing loans through the Hercules programme. The volume of non-performing loans outside banks' balance sheets, which continue to weigh on the economy and the allocation of resources, is also significant. The impact of the interest rate increase on the above-mentioned debt is also expected to be significant and negative.

That said, the granting of investment grade this year is expected to prove to be a strong signal for the markets, improving expectations and leading to a broadening of the investment base, thereby de-escalating the cost of financing, both for the Greek state and for domestic companies. Overall, the investment grade is an important condition for investment growth in order to systematically put the Greek economy on the path of strong growth. And vice versa, as long as there are uncertainties about the future of our economy the acquisition of the investment grade will be delayed.

## **Strong total and foreign direct investment**

Over the past two years, investment has shown a strong upward trend in an international context favourable to financing, but also following reform progress in specific areas and stabilisation of the wider economic context. Medium-term growth trends, after a decade-long recession, and as the country is still short of its potential output, may reach higher levels as long as unemployment continues to decline and the investment gap gradually closes.



The Greek government, like the other European governments, acquired in 2021 a powerful six-year financing tool, the European Recovery and Resilience Facility (RRF). In particular, Greece will receive EUR 31.16 billion (EUR 18.43 billion in grants and EUR 12.73 billion in loans) by 2026, with the aim of mobilising EUR 59.81 billion in total investment resources. At the end of 2022, Greece has disbursed a total of EUR 7.52 billion, an amount that contributed to a significant investment growth, at a 13-year high (21.8%), with the investment contribution to the growth rate of 2022 at 4.8 pps, the second highest on record. The second tranche from the recovery fund of EUR 3.56 billion (of which EUR 1.85 billion in loans) has already been disbursed this year, while the Greek government has requested a new EUR 5 billion loan under REPowerEU. The high absorption of European resources is expected to support the upward path of investment also in 2023, making the latter the main driver of growth for the coming year and perhaps the only component of GDP likely to exceed its annual performance compared to the previous year.

The strong dynamics of Foreign Direct Investment (FDI), which, according to estimates of the Bank of Greece, is expected to carry over to 2023, is worth noting here. According to the Bank's data, FDI in 2022 reached a record 30-year high of EUR 7.22 billion, continuing its upward trajectory from 2019, which was temporarily halted by the pandemic. A historically high level of foreign investment was also recorded in the Greek real estate and housing market (inflows increased by 68% compared to 2021), significantly pushing prices in this sector. This led to the resumption of the international and Greek economy after the pandemic, as well as an increase in residence permits following the change announced in the "golden visa" programme last September. A large share of foreign direct investment in 2022 was directed to the financial, insurance, and manufacturing sectors.

Finally, we should note that overall the level of fixed capital investment remains low. In particular, total investment in 2022 accounts for half of the 2007 level, while as a percentage of GDP, domestic investment lags behind the euro area average by almost 10 percentage points. There is therefore a large gap and a need to increase investment. In 2023, the increase in private sector borrowing costs and a possible delay of required reforms in the first two quarters of 2023 in a scenario of a prolonged electoral period may hold back investment growth.

## **Challenges in the banking sector**

Turbulence in the international banking system, uncertainty about the degree and duration of the slowdown in the real economy, rising borrowing costs, and a decline in private deposits pose new challenges to the financial system regarding banks' funding conditions, asset quality, and profitability prospects.

On the liability side, the long-lasting growth in private deposits has been halted since the final quarter of last year, with private sector deposits falling further by EUR 6.0 billion in the first quarter of this year. It is worth noting here that while the rise in key interest rates by the ECB already appears to have been incorporated, in part at least, into lending rates, deposit rates remain relatively low, with the ECB observing significant deposit outflows from European banks, which in the last five months, even before the March banking turmoil, total EUR 214 billion within the euro area. In February, deposits with euro-area banks fell by EUR 71.4 billion, the largest decline since data recording began in 1997, with household deposits falling by EUR 20.6 billion. The downward trend in deposits is not expected to reverse this year, as persistent inflation and a gradual weakening of fiscal support measures are shrinking disposable incomes and household savings.

Such a development may not allow Greek banks to further reduce their credit dependence on the ECB in a context of high interest rates in the future. The assets of the domestic banking system that are accepted as eligible by the Eurosystem as collateral for monetary policy operations, as reflected in the Bank of Greece's financial statements, declined over the previous year, but a significant increase in their value is expected with the granting of an investment grade to the domestic economy.



On the asset side, credit to firms continued to grow in early 2023, offsetting the credit contraction to households. Changes in supply and demand for loans contribute to developments in private-sector financing. On the demand side, uncertainty and rising borrowing costs act as a deterrent to new investment, but they appear to be offset by projects included in the National Recovery and Resilience Plan and the REPowerEU programme. On the supply side, a rapid decline in NPLs, albeit at a declining pace due to rising interest rates and the lifting of borrower support measures, has had a positive impact. Finally, the State guarantees of the Hercules programme remain a source of uncertainty, especially in the event of a prolonged economic shock (an analysis of developments in the financial system is presented in Section 2.2C).

## **Gradual strengthening of Manufacturing sectors**

As regards supply developments, high prices of energy and intermediate goods, as well as disruptions in supply chains and transport, slowed up the domestic trends on the production side. In particular, industrial production increased annually by 2.2% in 2022, similar in size to the corresponding growth rate in the euro area, against an increase of 10.1% in 2021, slowing down the sectoral diversification of the production base. At the beginning of this year, according to the latest available data for January, output increased marginally by 0.5%.

In the key sectors of Greek Industry in 2022, the gradual strengthening of manufacturing sectors, which overall increased at a rate of almost double the rate of 2021, is one of the most positive economic trends, while production in mining-quarrying, electricity, and water supply declined. In 2022, the producer price index in industry increased by 35.1% against a milder increase of 13.8% in 2021, due to inflationary pressures on both exported and domestically traded products (an overview of trends in key production sectors is included in Section 3.2).

## **Cautious expectations due to uncertainty**

The slowdown in economic activity, persistent inflation, and prolonged geopolitical uncertainty exacerbated global and domestic economic sentiment throughout last year. At the beginning of this year, expectations appear cautious, as international economic activity continues its positive but weakening trend, shocks affect the international financial system and scenarios of a protracted electoral period are being developed at home. In particular, the domestic economic sentiment indicator weakened mildly in March, with a similar development observed in the euro area.

Domestic business confidence appears to be at a turning point, with mixed trends and fluctuations by industry. In particular, there was a significant improvement in construction, mainly from private construction and less from public works, and to a lesser extent in services and retail trade, due to optimistic forecasts for the next period's demand. In the coming months, expectations are expected to strengthen in industry and construction, due to the easing of prices of energy and other raw materials, as well as in the services sector, due to the dynamics of international tourism. By contrast, there has been a marked decline in expectations in Industry, yet with the utilisation of factory capacity significantly strengthening and remaining above the long-term average.

On the household side, consumer confidence improved significantly, supported by the successive support packages, which are expected to remain in place in the first half of this year during the election period, offsetting the effects of rising living costs (more information on the economic sentiment is presented in Section 2.2A).

## **The labour market remains resilient**

Despite the severe shocks initially caused by the pandemic and then by the energy crisis, employment in the Greek economy has shown unprecedented resilience over the last 3 years, boosting household disposable income. Specifically, according to ELSTAT's Labour Force Survey, in 2022 the unemployment rate in Greece decreased for the ninth consecutive year and stood at 12.4% from





14.7% in 2021, showing its strongest decline since 2014, while the duration and the share of long-term unemployed decreased. Similar is the trend at the beginning of this year, where the non-seasonally adjusted unemployment rate fell to 11.2% from 13.9% in the same month of 2022 (analysis of domestic labour market trends is presented in Section 3.4). The long-term decline in unemployment in recent years has been driven by the recovery of the Greek economy since mid-2021, as well as extensive fiscal measures to support businesses, which prevented a sharp decline in labour demand during lockdowns and subsequently mitigated their energy costs.

A downward, albeit weakening, trend in unemployment is also expected this year, as the key determinants of employment are not expected to vary significantly. Among the factors that will foster the creation of new jobs in 2023 are strong tourism demand, a mild uptick in domestic consumption, investment growth in export sectors of industry and construction, as well as new employment support programmes of the Ministry of Labour, through subsidisation of recruitment and training of unemployed and workers.

That said, the expansion of production costs due to the increase in nominal wages is hampering the creation of new jobs. The new, third in a row, increase in the minimum wage as of 1 April 2023 will mainly affect small businesses in which a large part of workers are paid the minimum wage (Box 3.4). This increase, coupled with energy costs that remain high, is likely to put strong pressure on firms with the possibility of favouring employment regimes other than full-time, e.g. part-time work, as well as creating a spiral of wage and price increases. Regarding the trend of the seasonally adjusted wage cost index in the Greek economy as a whole, it increased for the seventh consecutive year, reaching 113.0 points from 111.4 in 2021 (+1.5%) and 109.2 in 2020. Moreover, a long electoral period can negatively affect the functioning of the economy and consequently employment.

Finally, it is worth noting that according to Eurostat data, Greece continues to occupy the penultimate position (ahead of Bulgaria) in terms of average labour productivity (per hour worked), as despite the strong growth of the domestic economy in 2022, the profitability of this production factor improved by only around 2.4%. The strengthening of labour productivity, given the constraints of the demographic characteristics of the Greek population, through fixed capital investments and reforms, is a necessary precondition for increasing medium- and long-term production capacities and maintaining the growth dynamic of the Greek economy.

## **Deterioration of the Current Account**

As imports have a high elasticity with respect to consumption, and the latter accounts for a large part of domestic output, the recovery of the Greek economy in 2022 brought about a significant decline in net exports, which was only partially offset by the surplus of services, resulting in an alarming deterioration of the deficit in the goods account. In particular, for goods, most of the increase in flows is due to fuel, but even if removed it from the trade balance, the deficit remains significant. It is also worth noting that consumer and intermediate goods rather than capital goods contribute for the most part to the increase in the imports of goods (Box 3.3 presents a special analysis of the “mix” of imports of goods over time). In the services sector, transport revenues were historically high while tourism revenues reached around 97% of the corresponding record level in 2019, as the total number of international air arrivals reached 23.7 million in 2022, recording only a slight decrease of -1.2% (-288,000) compared to 2019 (the external balance trends are detailed in section 3.3).

In the first month of this year, however, an initial contraction in the trade deficit was observed, mainly due to lower energy prices, with exports of goods at current prices increasing year-on-year by more than the corresponding imports. Also, according to market estimates, tourism revenues in 2023 are expected to increase and slightly exceed those of 2019. Overall, the likely slowdown in domestic demand, as well as an improvement in the external environment from mid-2023, coupled with a gradual decline in energy prices and a possible decline in the high exports deflator (see the analysis in Box 3.1 of The Greek Economy 4/2022) are expected to restrict the Greek economy's trade deficit in 2023.



The tendency for the trade deficit to widen whenever there is growth shows that the relaunch of the economy, which is naturally a positive development, falls short of the strengthening of the production base, and combined with the inflation that this imbalance causes, undermines the possibility of raising real incomes thereafter. It also maintains the risk of high “twin deficits”, which, as has been shown, are particularly detrimental to the Greek economy. Having said that, by interpreting the external deficit as the difference between investment and savings, its widening mainly reflects an increase in investment, and to a large extent an increase in inventories. Therefore, to the extent that the external deficit is maintained for a short period and mainly finances fixed investment in export-oriented sectors, the burden it creates on the domestic economy can be mitigated.

Finally, the strengthening of the openness of the Greek economy, with the sum of exports and imports relative to GDP reaching its highest levels on record (82% of GDP) in 2022, is worth noting as an important development. In particular, the increase in exports of goods in recent years, coupled with the gradual strengthening of manufacturing sectors, is one of the most positive trends for the domestic economy (an analysis of the evolution of the openness of the Greek economy is presented in Box 3.1).

**Box 3.1**

## Macroeconomic forecast drivers

**Risks**

- Delay in the formation of a government.
- Deterioration in the current account balance.
- Persistent inflation in essential goods, such as food.
- Risk of a new round of rising international energy prices towards the end of 2023.
- Instability in the international financial system.
- Progressively tighter fiscal framework.
- Delayed granting of investment grade for Greece (after 2023).
- Delay in implementing reforms of the “Greece 2.0” plan, as well as in absorbing the resources of the loan arm.
- The risk of a further build-up of arrears and NPLs due to rising interest rates and living costs.
- The State guarantees of the Hercules programme are a source of uncertainty, especially in the event of a prolonged economic shock.
- Slowing down in the sectoral diversification of the production base, e.g. fatigue and fluctuations in industrial production.

**Positive outlook**

- Government revenue increases significantly in nominal terms, while government debt decreases as a percentage of GDP.
- The granting of investment grade may unlock international funds for further productive investments.
- Maintaining an enhanced openness of the economy, with a gradual improvement in the external balance.
- Programmatic agreement on reforms with a medium-term horizon of 4 years (2023-2027), coming from a new governing majority.
- The debate on a new framework of fiscal rules in the EU and the timely use of new financing tools such as REPowerEU.
- The reduction of NPLs at the level of the economy, with a more efficient allocation of resources and a gradual reintegration of restructured former NPLs into the banking system.

**Medium-term forecasts**

Based on the above analysis of the international and domestic economic climate and macroeconomic fundamentals, as well as on some key assumptions, we form short-term projections for the trends in the components of domestic GDP.

Regarding consumption, the most constraining factor in consumer spending is the high, albeit easing, inflation, the cumulative effect of which has started to become more evident since the final quarters of last year. While energy prices are gradually declining in 2023, according to estimates from international analysts, prices for essential goods such as food remain high. The depletion of savings accumulated during the pandemic, as well as the high cost of new and servicing existing borrowing, also contributes to the gradual slowdown of the post-pandemic, explosive at first, consumption drive. By contrast, the boost in employment and an increase in the minimum wage are inhibiting the slowdown in consumption. Finally, disposable household incomes are also supported by fiscal interventions, which are expected to remain in place in the first half of 2023 and gradually expire in the





second half, following the end of the national elections. Overall in 2023, government consumption is estimated to remain unchanged from the previous year, with the aim of achieving a small fiscal surplus this year.

For 2023, consumption growth is expected to slow down due to the above-mentioned factors and the higher base effect, with annual changes in private and public consumption estimated at 1.3% and 0.0% respectively, and total consumption growing at 1.2%.

### Box 3.2

#### Baseline scenario assumptions

- The euro area economy follows the ECB's baseline scenario (March 2022) of growth of 1.0% and inflation of 5.3% in 2023.
- Geopolitical instability in Eastern Europe and the Mediterranean continues at a similar intensity to that in 2022.
- A slight delay (1-2 quarters) in the implementation of the "Greece 2.0" plan.
- Slightly higher public expenditure than in the 2023 SB.
- Granting of investment grade in the second half of 2023 by at least one rating agency.
- Inflation in Greece will fluctuate slightly below the euro-area average in 2023.
- Incoming tourism tracks the 2019 performance.

Investments are expected to continue to grow in 2023, with the resources of the recovery fund contributing to further strengthening of the openness and competitiveness of Greek enterprises. That said, persistent uncertainty and high inflation are the main constraints on investment dynamics this year. Higher production costs, driven by high prices of energy and other intermediate goods, as well as nominal wage growth, coupled with higher borrowing costs from the banking system, are projected to significantly squeeze corporate profits, reducing available investment resources. Also, a small delay (1-2 quarters) in the implementation of the "Greece 2.0" plan is expected due to the national elections.

Overall, for 2023, fixed investment is expected to increase, especially in the second half of the year, when it is considered likely that the first rating agency will grant an investment grade. The increase is expected to be above that of 2022 in absolute terms, which nevertheless translates into a slightly smaller year-on-year change. The annual change in fixed capital investment is estimated at 10.0%, with total investment growing annually by 7.1% due to a small decline in inventories.

Regarding the external balance, we expect a marginal improvement in 2023, with an increase in the share of services in exports and the share of goods in imports. In particular, the slowdown in domestic demand is expected to contain import growth, while the improvement in the external environment since mid-2023, coupled with favourable forecasts for tourism revenues and a gradual de-escalation in energy prices which may reduce the high deflator mainly for exports, is expected to support exports growth. Finally, the depreciation of the euro vis-à-vis the dollar is stimulating extra-EU exports.

For 2023, taking into account assumptions about the euro area's growth rate, energy, and intermediate goods prices and taking into account the general climate of uncertainty, we estimate that the annual growth of exports will be at 3.2%, while for imports it will stand at 2.6% in 2023, improving the current account.

Finally, we estimate a clearly slower growth of 2.4% in 2023 compared with the previous year, with a small negative outlook, owing to the above-mentioned risks, notably the slowdown in the global economy and the persistence of inflation and uncertainty, as well as taking into account the impact of the higher base effect in 2022.

**Table 3.2**

Comparison of forecasts for selected economic indicators for 2023 (at constant market prices, annual % changes)

	MinFin	EC	IOBE	IMF	OECD
	2023	2023	2023	2023	2023
GDP	2.3%*	1.2%*	2.4%	1.8%*	1.6%
Consumption	:	:	1.2%	:	:
Private Consumption	1.0%	1.0%	1.3%	1.1%	0.8%
Public Consumption	-1.5%	-3.7%	0.0%	-3.1%	1.6%
Gross Fixed Capital Formation	15.5%	6.3%	10.0%	10.5%	2.7%
Exports	1.0%	3.9%	3.2%	5.7%	2.8%
Imports	2.6%	3.1%	2.6%	2.5%	2.4%
Harmonised Index of Consumer Prices (%)	5%	4.5%*	4.3%	3.2%	4.3%
Unemployment (% of labour force)	12.6%	12.6%	11.0%	12.2%*	11.8%*
General Government Balance (% of GDP)	0.7%	1.1%	:	-1.9%	0.54%
Current Account Balance (% GDP)	:	-8.6%	:	-6.7%*	-5.8%*

Sources: Draft State Budget, Ministry of Finance, November 2022, \*March 2023 estimate - European Economic Forecast, Autumn 2022 and Winter 2023\*, European Commission, November 2022 and February 2023 - The Greek Economy 01/23. IOBE, April 2023 - IMF Country Report No. 22/173, IMF, June 2022, \*World Economic Outlook, October 2022 - Economic Outlook 112, OECD, January 2023



## 3.2 Trends in key sectors

- Industrial production growth of 2.2% in 2022 against an increase of 10.1% in 2021.
- Acceleration in Construction with output growing by 23.0% in 2022 against 7.3% in 2021. There is also an increase in permits but at a slower pace than a year earlier.
- An increase of 3.3% in the volume of retail trade in 2022 against a stronger increase of 10.2% in 2021. Stronger expectations in the first quarter of 2023 compared to 2022.
- An increase in turnover in most sub-sectors of Services in 2022 but the impact of strong inflationary trends is significant.

### Industry

In 2022 as a whole, the industrial production index increased by 2.3%, which was significantly weaker than in 2021 (+10.1%). In January 2023, the month with the latest available data, output increased marginally by 0.5%, when in the same month of 2021 the relevant indicator had decreased by 0.8%.

The producer price index in Industry in 2022 increased by 35.1% against a milder increase of 13.8% in 2021, a year with significantly milder inflationary trends. Price increases were strong both for exported products (39.8% against 20.0% in 2021) and for domestically sold products (+33.5% against 11.9%).

In the euro area, industrial production increased by 2.2% in 2022 (against an increase of 8.8% in 2021). In addition, in January 2023, industrial production increased by 0.7% while it had increased by 1.3% in the same month of 2021.

In the main sectors of Greek industry for the whole of 2022, production declined in mining-quarrying (-7.8% against an increase of 4.7% in 2021), electricity supply (-3.7% against +16.4%), and water supply (-2.2% against +1.0%). By contrast, production increased in Manufacturing, but at a rate less than half as high as in 2021 (4.4% instead of 9.0%).

Uncertainty in the supply of natural gas due to the Russian war in Ukraine was the key driver of production growth in coal and lignite mining (22.0% against a marginal reduction of 0.4% in 2021). Mining of minerals declined (-7.3% against -10.5% a year earlier), while a similar trend was observed in the activity of other mines too (-8.9% against +13.4%).

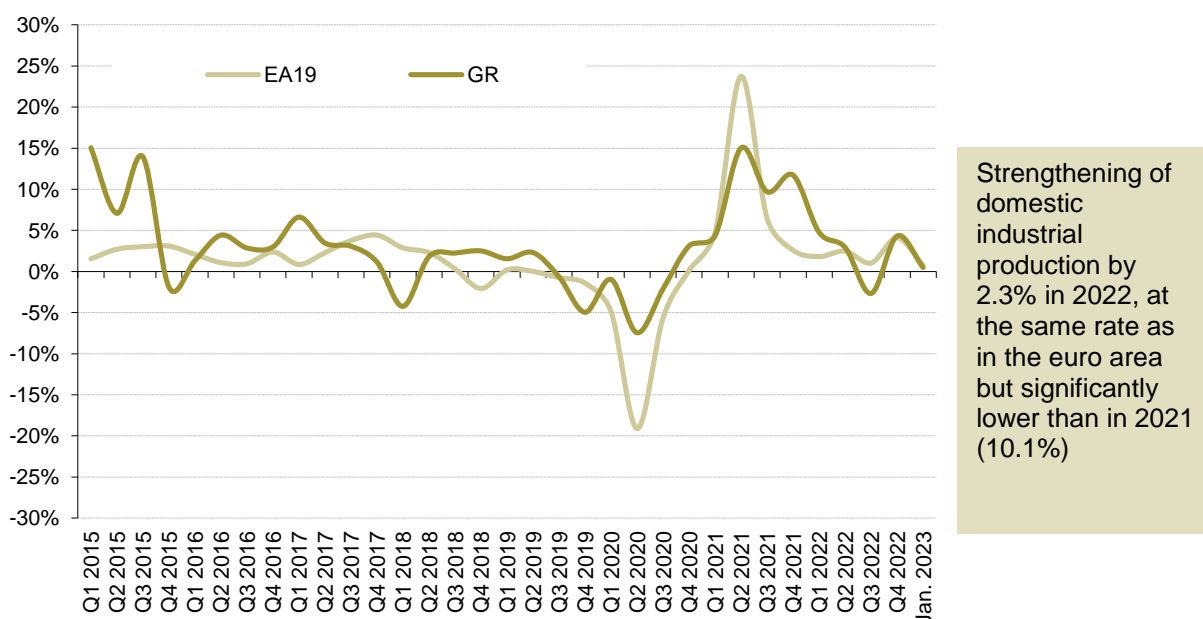
In Manufacturing, production increased in 19 out of 26 subsectors. Among the subsectors most important for the Greek economy, the production of medicines increased by 11.2% against an increase of 12.3% in 2021. Production of basic metals increased by 4.2% (against 1.5% in 2021), while food production continued to grow at a rate similar to 2021 (4.2% against 4.0%).

Among the other industrial subsectors, the production of vehicles (24.0% against 20.7%), the construction of computers (21.2% against 25.0%), and the repair and installation of machinery related to circular economy activities (+16.8% against 2.6% in 2021) increased strongly. By contrast, production declined in the manufacture of transport equipment (-5.1% against a strong increase of 26.8%), electricity supply (-3.7% instead of 16.4%), and water supply (-2.2% compared to an increase of 1.0% last year). The output decline in electricity and water is partly related to both the significant increase in energy prices and the general inflationary trends recorded in 2022.

In 2022, an increase was recorded in the output of most main industrial product groups. The largest annual increase was recorded in durable consumer goods (22.9% after an increase of 17.3% in 2021), followed by non-durable consumer goods (5.9% against 8.5%), capital goods (5.5% against 13.8%) and intermediate goods (2.0% against 7.8%). Finally, energy production decreased by 2.5% compared to an increase of 12.0% in 2021.

**Figure 3.4**

Industrial Production Index in Greece and in the Euro area (year-on-year % change)



Sources: ELSTAT, Eurostat

## Construction

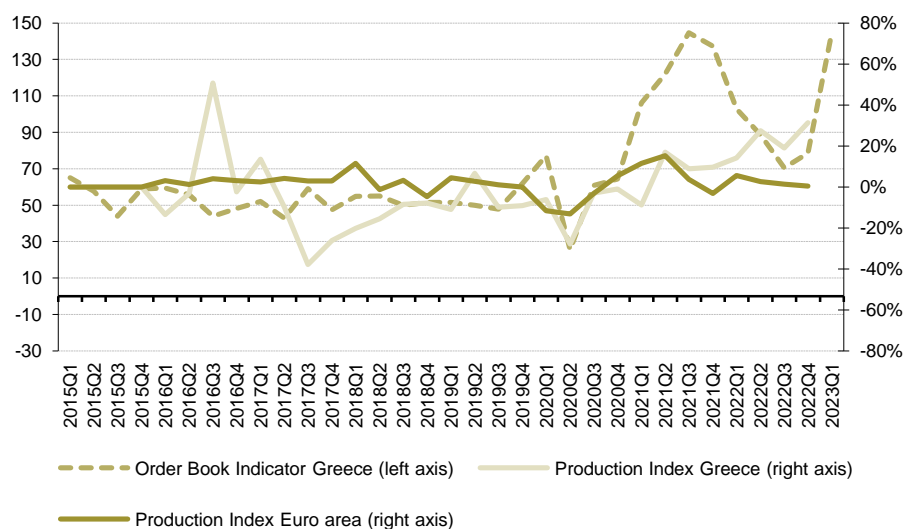
In 2022 as a whole, the production index in the construction industry increased by 23.0%, having accelerated significantly compared to 2021, when it had increased by 7.3%. By contrast, in the same period, in the euro area (20 Member States), production in construction declined by 1.0% against an increase of 4.3% a year earlier.

In Greece, in the individual construction activities in 2022, the output of building construction increased by 17.1% against a corresponding increase of 15.6% in 2021. In addition, the index for civil engineering works increased by 29.6% (against a significantly smaller increase of 1.8% in 2021).

Building data show that the strong increase in terms of the number of permits recorded in 2021 weakened in 2022. In particular, the number of new permits increased by 4.6% against an increase of 26.8% a year earlier. By contrast, new buildings appear to be smaller, as both the surface and volume index fell by 8.9% and 2.2% respectively compared to 2021.

**Figure 3.5**

Production Index in Construction and Building Activity Index



Acceleration of construction with a production index increase of 23.0% in 2022 as a whole, against a milder increase of 7.3% in 2021

Source: ELSTAT

## Retail Trade

The volume index in retail trade as a whole increased by 3.3% in 2022, against a stronger increase of 10.2% in 2021. The work volume expanded in 6 of the 8 subsectors of retail trade.

The largest increase was recorded in books – stationery (+13.0% against + 23.9 % in 2021), furniture - electrical appliances (10.8% against 25.2%), and medicines – cosmetics (7.9% against 22.0%). The increase was milder in department stores (3.2% against 4.5%), fuel (3.2% against 4.1%), and clothing - footwear (2.6% against 35.5%). In contrast, trade volumes declined in supermarkets (-2.5% against +2.0% in 2021) and in food – beverages – tobacco (-1.6% against an increase of 10.6% in 2021).

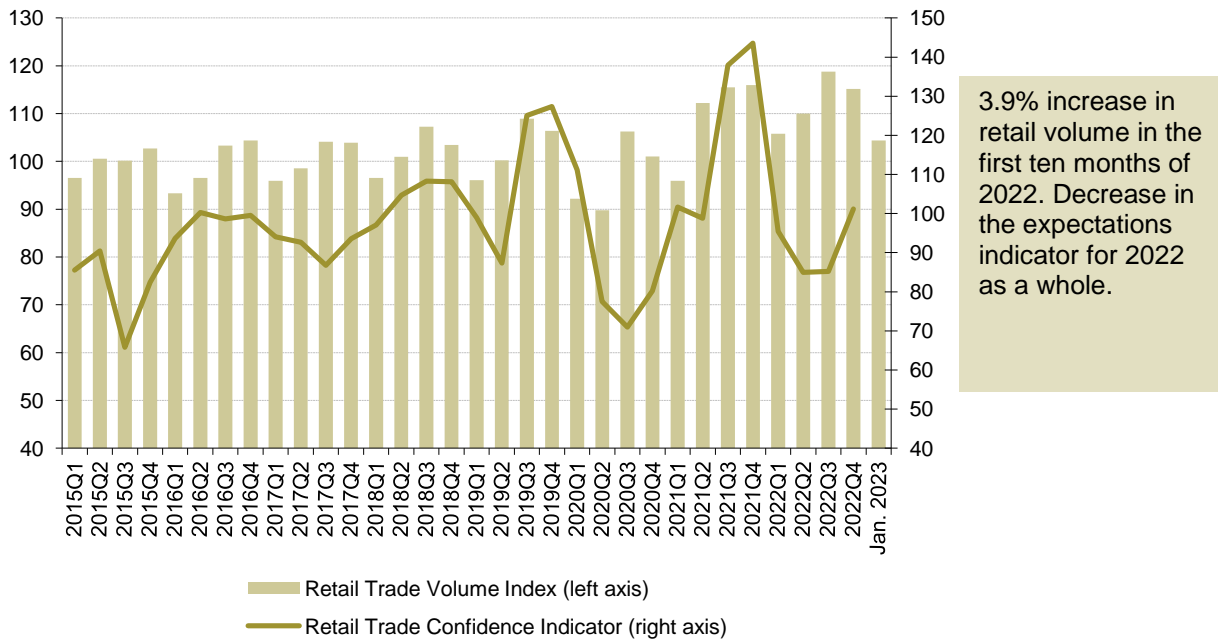
Expectations in the retail sector in the first quarter of 2023 are recovering compared to the same period in 2022 when pessimism dominated in all retail sectors due to the uncertainty caused by Russia's war in Ukraine. In the first quarter of 2023, the relevant indicator increased by 21.3 points, when in the same period of 2022 it was falling by 24.9 points.

In terms of specific activities, expectations deteriorated only in food – beverages – tobacco (-4.7 points after a decrease of 0.8 points in 2022). In contrast, the representatives of clothing-footwear (an increase of 70.8 points against a fall by 23.9 points in 2022), department stores (+50.3 against -73.5 in Q1 2022), vehicles (28.8 against -21.8 points) and household equipment (24.4 against 24.2 last year) became more optimistic.



Figure 3.6

Retail Trade Volume Index (2010=100) and Retail Trade Confidence Indicator (1996-2006=100)



Sources: ELSTAT, IOBE

In particular, the automobile-vehicle index improved in the first quarter of 2023, standing at 124.7 points, compared with 114.7 points in the corresponding period of 2022. The current sales balance returned to positive territory, after posting very negative values in 2020 and 2021, as it approached 14 points, compared with -26 points in 2021, with the share of those who reported higher sales doubling, and of the companies reporting declining sales falling significantly. On the inventory side, the negative balance declined as conditions in global vehicle supply chains gradually improved, while the order balance remained at 8 points, with the stabilising trends strengthening. In the balance for sales expectations, the estimates improved and the balance stood at 18 points, compared with 10 points in 2021, with a decrease in those expecting sales to fall in the following period. In employment, the already strong signs of stabilisation strengthened further, while on the price side, the estimates of an increase in the coming period remained very high, with 70% believing that prices will go up.

**Table 3.3**

Volume Index in Retail Trade, annual changes

Category of Retail Trade Stores	Volume Index (2010=100)				
	2020	2021	2022	Change 2021/2020	Change 2022/2021
Overall Index	97.3	108.9	112.4	10.2%	3.3%
Overall Index (excluding automotive fuels and lubricants)	101.3	113.4	115.5	10.5%	1.9%
Store Categories					
Supermarkets	111.6	113.9	111.1	2.0%	-2.5%
Department Stores	85.0	88.8	91.7	4.5%	3.2%
Automotive Fuels	80.5	83.9	86.5	4.1%	3.2%
Food – Drink – Tobacco	79.6	88.1	86.7	10.6%	-1.6%
Pharmaceuticals – Cosmetics	116.5	142.1	153.3	22.0%	7.9%
Clothing – Footwear	81.9	110.9	113.7	35.5%	2.6%
Furniture – Electric Equipment – H. Appliances	110.3	138.1	153.0	25.2%	10.8%
Books – Stationary	116.3	144.0	162.7	23.9%	13.0%

Source: ELSTAT

**Table 3.4**

Business Confidence Indicators in Retail Trade (1996-2006=100)

	Jan. - Mar. 2021	Jan. - Mar. 2022	Jan. - Mar. 2023	Change 2022/2021	Change 2023/2022
Food-Drinks-Tobacco	100.9	100.1	95.4	-0.8	-4.7
Textiles - Clothing – Footwear	71.5	47.6	118.4	-23.9	70.8
Household Appliances	105.9	81.7	106.1	-24.2	24.4
Vehicles-Spare Parts	117.7	95.9	124.7	-21.8	28.8
Department Stores	136.3	62.8	113.1	-73.5	50.3
<b>Total Retail Trade</b>	<b>115.1</b>	<b>90.2</b>	<b>111.5</b>	<b>-24.9</b>	<b>21.3</b>

Source: IOBE

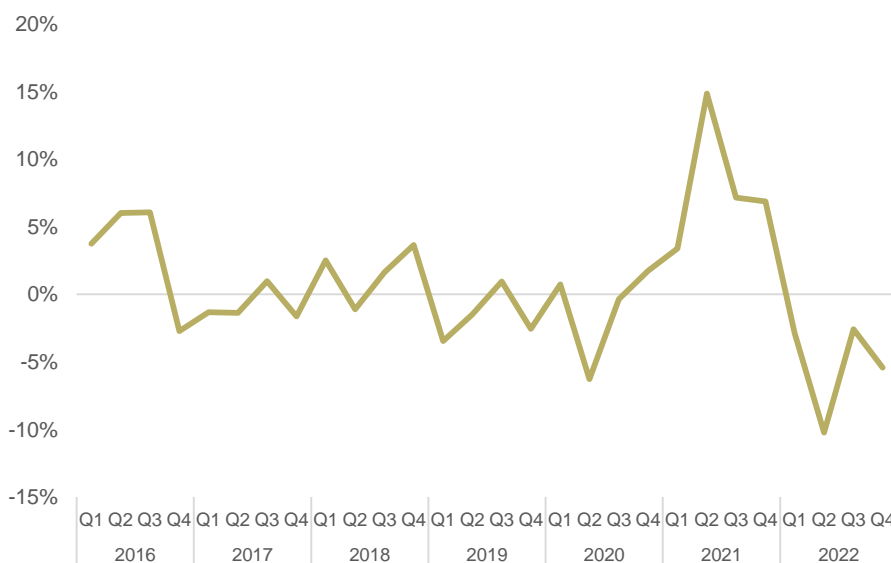


## Wholesale trade

In 2022 as a whole, the turnover ratio in Wholesale trade decreased by 5.3% against an increase of 8.0% a year earlier. By contrast, the turnover index, which also incorporates the impact of prices, increased in 2022 by 21.5%, the same rate as in 2021 (22.1%).

**Figure 3.7**

Turnover Index in Wholesale Trade



Sales volume decrease in Wholesale Trade by 5.3% in 2022 against an increase of 8.0% in 2021

Source: ELSTAT

## Services

In 2022 as a whole, turnover in services declined compared to 2021 in only one of its thirteen subsectors. However, the near-universal improvement in services indicators is also strongly related to the strong inflationary trends that emerged in 2022.

The largest increase was recorded in building and outdoor service (+28.1% against a milder growth of 6.0% in 2021). This was followed by the supply of consulting and accounting services (+22.2% after an increase of 13.2% a year earlier), cleaning activities (+20.3% from +6.8%), and data processing and information services, where the growth rate decreased compared to 2021 (13.0% against +26.7%). Computer programming - other IT services (8.9% against +13.1%) and telecommunications (5.8% against 7.3%) came next at a distance. A decline, which had already started in 2021, was recorded only in postal and courier services (-5.0% against -0.9% in 2021).

According to recent trends in the leading indicators from IOBE's business and consumer surveys, expectations improved in the first quarter of 2023 in three of the four examined subsectors of services. The overall sector indicator strengthened by 27.3 points against a significant decrease of 35.6 points in the same period of 2021. The low base of expectations in the first quarter of 2022 is also related to Russia's declaration of war on Ukraine and the overall climate of instability and insecurity that it created in Greece. However, it seems that in the first quarter of 2023, optimism is returning in most sectors.

In particular, expectations are strongly up in hotels and tourism in general (an increase of 53.1 points), business services (an increase of 29.4 points), and information services (an increase of 7.6 points). By contrast, representatives of financial institutions appear less optimistic (a 12-point decrease in the relevant indicator).

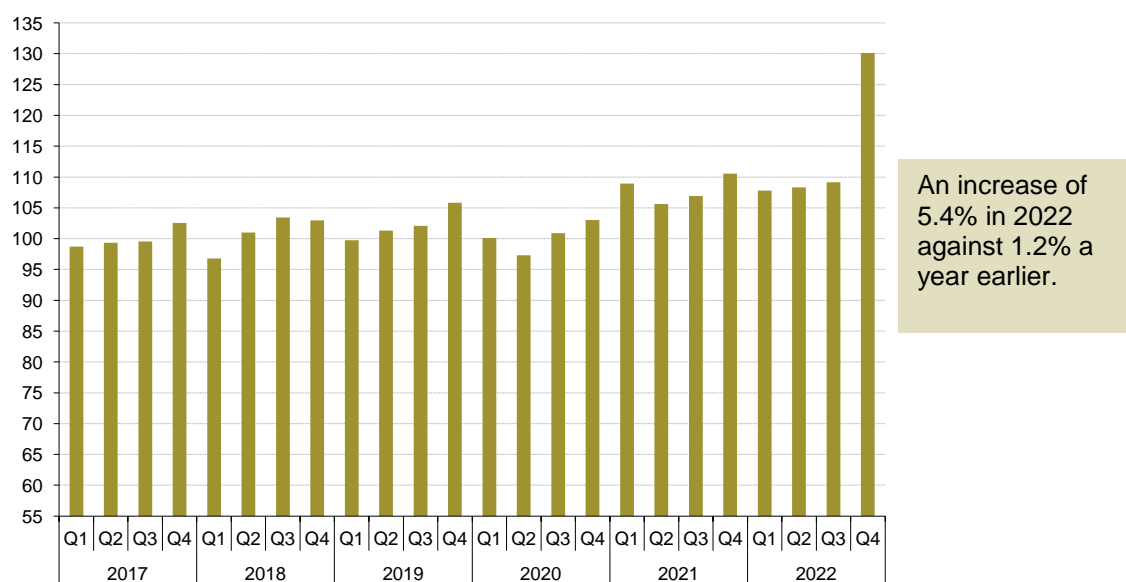




**Table 3.5**  
Turnover Index in Services (2010=100)

	Jan. - Mar. 2021	Jan. - Mar. 2022	Jan. - Mar. 2023	Change 2021/2020	Change 2022/2021
Hotels – Restaurants – Travel Agencies	99.3	57.3	110.4	-42	53.1
Financial Intermediation	123	115.6	103.6	-7.4	-12
Other Business Services	110	75.3	104.7	-34.7	29.4
Information Services	96.2	91.7	99.3	-4.5	7.6
<b>Total Services</b>	<b>106.5</b>	<b>70.9</b>	<b>98.2</b>	<b>-35.6</b>	<b>27.3</b>

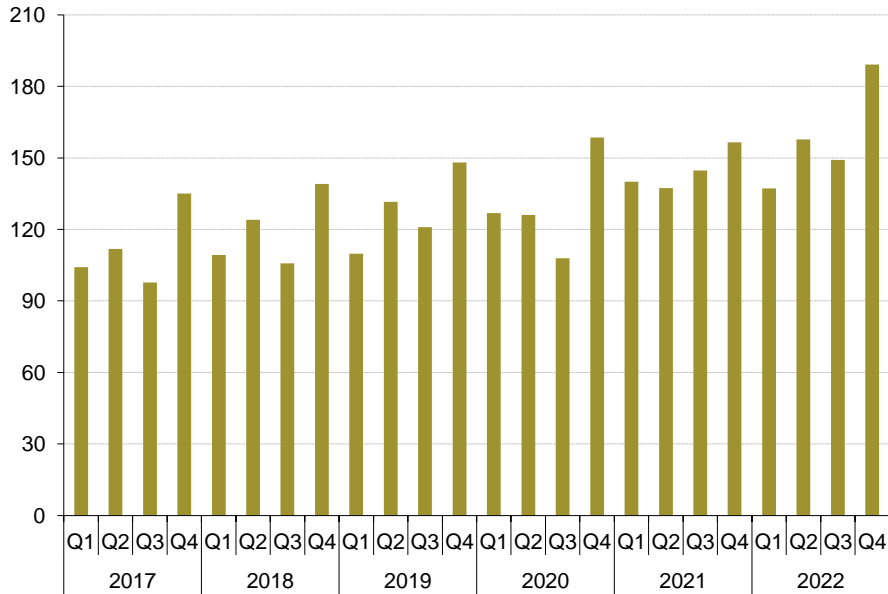
**Figure 3.8**  
Turnover Index in Telecommunications (branch 61)



Source: ELSTAT

**Figure 3.9**

Turnover Index in Computer Programming, Consultancy and Related Activities (branch 62)

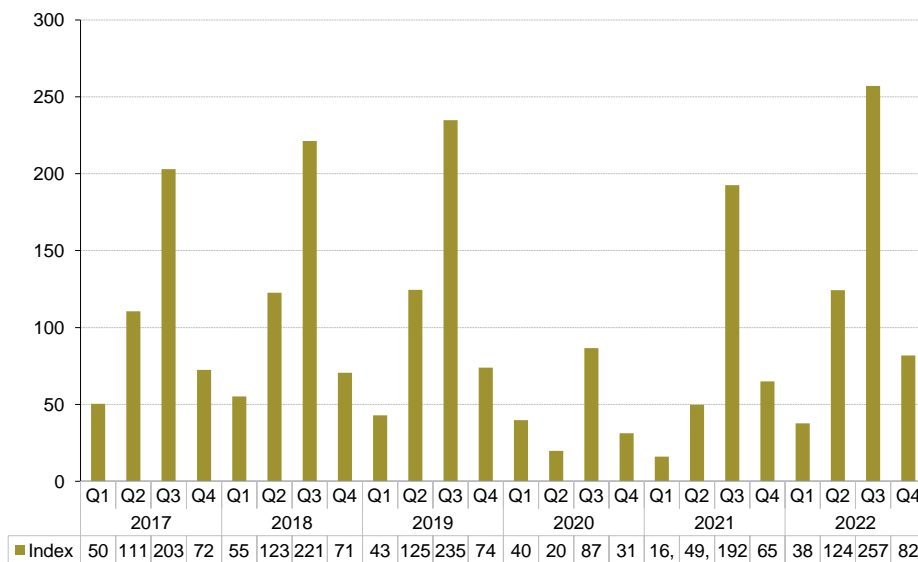


An improvement of 9.4% in 2022, against a stronger increase of 11.4% in 2021

Source: ELSTAT

**Figure 3.10**

Turnover Index in Tourism (Accommodation and Food Services Activities, branches 55 &amp; 56)



Further increase of 54.9% in 2022 following the very good performance of 2021 (+82.0% compared to a year earlier)

Source: ELSTAT



### 3.3 External balance

#### A. Analysis of exports and imports from national accounts

- Strong growth of exports of goods in nominal terms in 2022, at a rate of 36.8%, and imports at a rate of 42.3%. Milder, but still strong growth in exports excluding petroleum products (+20.0%).
- An increase in all product categories, with the largest increase in the exports of fuel and industrial products.
- A strong increase in imports in 2022, by 42.3% at current prices, to EUR 93.0 billion, from EUR 65.4 billion a year earlier.
- A widening of the trade deficit compared to 2021 by 51.1%, to EUR 38.4 billion.
- Stronger demand from countries of the euro area (+32.7% or +EUR 5.2 billion) and the Middle East & North Africa (+27.9% or EUR 1.5 billion) and weaker demand from Asian countries (-2.5% or EUR 71.9 million).

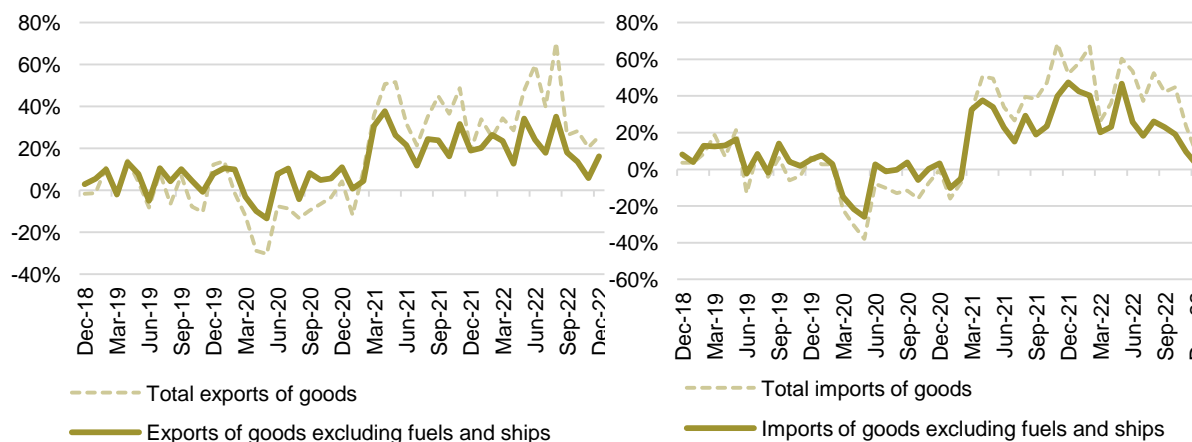
Exports of goods stood in January-December 2022 at EUR 54.7 billion, compared with EUR 39.9 billion a year ago, an increase of 36.8%, in current prices. Excluding the exports of petroleum products and ships, the remaining exports increased by 20.0% to EUR 34.6 billion, from EUR 28.8 billion in 2021. The imports of goods rose strongly in 2022, by 42.3% at current prices, to EUR 93.0 billion, from EUR 65.4 billion a year earlier. Excluding the imports of petroleum products and ships, the remaining imports increased by 23.3% to EUR 60.0 billion, from EUR 48.7 billion in 2021. As a result of the above trends in the main components of the external balance of products, the trade deficit stood EUR 13.0 billion higher than in 2021 (+51.1%), at EUR 38.4 billion, up from EUR 25.4 billion. As a result, the value of exports of goods of the Greek economy accounted for 58.8% of its imports in 2022, while a year earlier it had reached 61.1%.

In detail, exports to agricultural products increased by 20.8% at current prices between January and December 2022, to EUR 9.1 billion, from EUR 7.6 billion in 2021. Fuel exports recorded the largest nominal increase of 78.5%, reaching EUR 20.1 billion, up from EUR 11.3 billion in 2021. Exports of these two categories account for 53.5% of the value of domestic exports of goods this year, up from 47.1% a year earlier. Exports of industrial products increased strongly in 2022 (+21.9%), totalling EUR 22.8 billion, up from EUR 18.7 billion in 2021. This development was mainly driven by an increase in exports for industrial goods classified chiefly by raw material by 29.8%, from EUR 6.2 billion to EUR 8.1 billion. Stronger international demand was also recorded for chemicals and related products by 6.6%, with their value at EUR 6.0 billion. Machinery and transport equipment also recorded a strong increase of 27.7% to EUR 4.9 billion from EUR 3.9 billion, while exports to miscellaneous industrial goods also increased (+26.6%, to EUR 3.7 billion).



**Figure 3.11**

Total exports-imports of goods and exports-imports of goods except fuels and ships (current prices)



Source: ELSTAT, Processing: IOBE

Exports excluding petroleum products – ships stood at EUR 34.6 billion in January-December 2022, 20.0% higher than in 2021. Imports excluding oil products – ships in the same period stood at EUR 60.0 billion, 23.3% higher than in 2021

Finally, exports of raw materials increased by 2.9%, to EUR 1.95 billion, from EUR 1.89 billion a year earlier, while exports of non-classified items and transactions increased by 26.4%, from EUR 528.0 million in 2021 to EUR 667.1 million in 2022.

In terms of trends in exports of goods by geographical area, the exports to euro area countries expanded strongly in 2022 by 32.7%, approaching EUR 21.2 billion, from EUR 16.0 billion in 2021. The EU as a whole saw an increase of 40.2% or EUR 8.6 billion, with exports to this region reaching EUR 30.1 billion, up from EUR 21.5 billion a year earlier. Among the euro area countries that absorb the bulk of Greek exports, there was a significant expansion to Germany, by 20.8%, from EUR 3.0 billion to EUR 3.5 billion, and a decrease to France by 10.0% from EUR 1.9 billion to EUR 1.7 billion. Exports of goods to the top destination, Italy, increased sharply by 43.0%, reaching EUR 5.7 billion in 2022 from EUR 4.0 billion in 2021.

Among the other countries of the European Union, where total exports increased by 62.0% or EUR 3.4 billion, to reach EUR 8.9 billion, Bulgaria continued to be the main export destination, with an increase of 119.1% or EUR 2.3 billion compared to 2021. Positive trends were recorded in two other countries that absorb a significant share of Greek exports: Romania (+31.2% or EUR 433,5 million to EUR 1.8 billion) and Poland (+24.6% or EUR 181.3 million, to EUR 919.6 million).

**Table 3.6**

Exports per one-digit category at current prices, January – December (€ million)\*

Product	Value		% Change	% Share	
	2022	2021	22/21	2022	2021



AGRICULTURAL PRODUCTS	9,144.6	7,569.8	20.8%	16.7%	18.9%
Food and Live Animals	6,946.3	5,899.2	17.8%	12.7%	14.8%
Beverages and Tobacco	1,151.2	925.5	24.4%	2.1%	2.3%
Animal and vegetable oils and fats	1,047.1	745.1	40.5%	1.9%	1.9%
RAW MATERIALS	1,946.4	1,891.5	2.9%	3.6%	4.7%
Non-edible Raw Materials excluding Fuels	1,946.4	1,891.5	2.9%	3.6%	4.7%
FUELS	20,109.2	11,264.9	78.5%	36.8%	28.2%
Mineral fuels, lubricants, etc	20,109.2	11,264.9	78.5%	36.8%	28.2%
INDUSTRIAL PRODUCTS	22,809.0	18,717.4	21.9%	41.7%	46.8%
Chemicals and Related Products	6,041.2	5,667.7	6.6%	11.0%	14.2%
Manufactured goods classified chiefly by raw material	8,092.1	6,233.0	29.8%	14.8%	15.6%
Machinery and transport equipment	4,954.5	3,878.3	27.7%	9.1%	9.7%
Miscellaneous manufactured articles	3,721.3	2,938.4	26.6%	6.8%	7.4%
Other and transactions not classified by category	667.1	528.0	26.4%	1.2%	1.3%
TOTAL EXPORTS	54,676.4	39,971.5	36.8%	100.0%	100.0%

\* Provisional data

Source: Eurostat

There was a strong boost in the demand for Greek exports in the rest of Europe, by 48.6%, from EUR 6.9 billion in 2021 to EUR 10.3 billion one year later. This primarily transpired in Türkiye, where exports increased by 21.5%, from EUR 2.1 billion to EUR 2.5 billion, and secondarily in the United Kingdom, with an increase of 64.5% from EUR 1.3 billion in 2021 to EUR 2.2 billion one year later.

Exports to North America rose strongly, by 35.1%, from EUR 1.9 billion in 2021 to EUR 2.6 million in 2022, mainly due to an increase in exports to the United States of 38.1%, from EUR 1.6 billion in 2021 to EUR 2.2 billion in 2022, and to Canada, by 33.2% or 65.5 million. Similarly, exports to Mexico increased (+2.2%).

Exports to Central-Latin American markets increased by 35.1% in 2022, totalling EUR 416.2 million from EUR 310.6 million in 2021. The increase in exports to the countries of the region is mainly due to a 44.8% increase in the demand for Greek products from Panama, which reached EUR 203.1 million from EUR 140.3 million a year earlier. Exports to Brazil declined (-21.5% or -EUR 15.1 million).

Exports to the countries of the Middle East and North Africa also rose by 27.9% to EUR 6.8 billion from EUR 5.3 billion, mainly due to a sharp increase in exports to Libya (+83.7%), where exports totalled EUR 1.8 billion in 2022, compared with EUR 1.0 billion a year earlier, but also to Lebanon (+34.8%), where they increased by EUR 408.9 million in 2022 and reached EUR 1.8 billion. To two other important export destinations in the Middle East, exports to the United Arab Emirates decreased by 3.5%, to EUR 353.0 million, while exports to Saudi Arabia fell by 11.6% to EUR 542.5 million.

By contrast, demand for Greek goods weakened in Asian countries, where exports fell by 2.5% in 2022, to EUR 2.8 billion from EUR 2.9 billion in 2021. This development is mainly due to a 20.8% drop in exports to South Korea, from EUR 907.9 million in 2021 to EUR 726.8 million in 2022. Similarly, there was a sharp decline in demand from China (-43.0%, to EUR 407.7 million from EUR 715.4 million in 2021).

The flow of exports of Greek products to Oceania was 9.9% higher, with their value standing at EUR 265.7 million in 2022 from EUR 242.8 million a year earlier. The rise came from a similar trend in Australia, where exports grew at a rate of 9.9%, from EUR 212.7 million to EUR 233.8 million. Similarly, there was an increase in New Zealand (+5.9%).

To sum up, the strong increase in Greece's exports of goods in January-December 2022 by 36.8% at current prices came from an increase in all categories of goods, notably petroleum products (+78.5%), industrial products (+21.9%), and agricultural products (+20.8%). The strong increase in the value of Greek exports is due to higher sales prices of goods due to global price increases, with the top five countries with the highest demand for Greek products being Italy, Bulgaria, Germany, Cyprus, and Türkiye. At the same time, continued increases in imports pushed the trade deficit to EUR 38.4 billion, which continues to widen (+51.1%) and is causing concern to the economy. The five countries with the largest share of imports of products in 2022 are China, Iraq, Italy, the Netherlands, and the US. In the



unfavourable and uncertain environment of high inflation as well as the energy crisis, Greek exports mark a new record of openness for 2022 and are expected to have a similar trajectory in the first months of 2023.

**Table 3.7**

Exports by destination, January-December 2022 (€ million)\*

ECONOMIC UNIONS – GEOGRAPHIC REGION	EXPORTS		% CHANGE
	2022	2021	22/21
EU (27)	30,134.2	21,497.9	40.2%
Euro Area	21,246.1	16,012.0	32.7%
G7	10,171.4	8,161.6	24.6%
North America	2,624.3	1,943.2	35.1%
BRICS	969.8	1,201.0	-19.2%
Middle East & North Africa	6,783.5	5,303.4	27.9%
Oceania	265.7	242.8	9.4%
Central-Latin America	416.2	310.6	34.0%
Asia	2,804.1	2,876.0	-2.5%

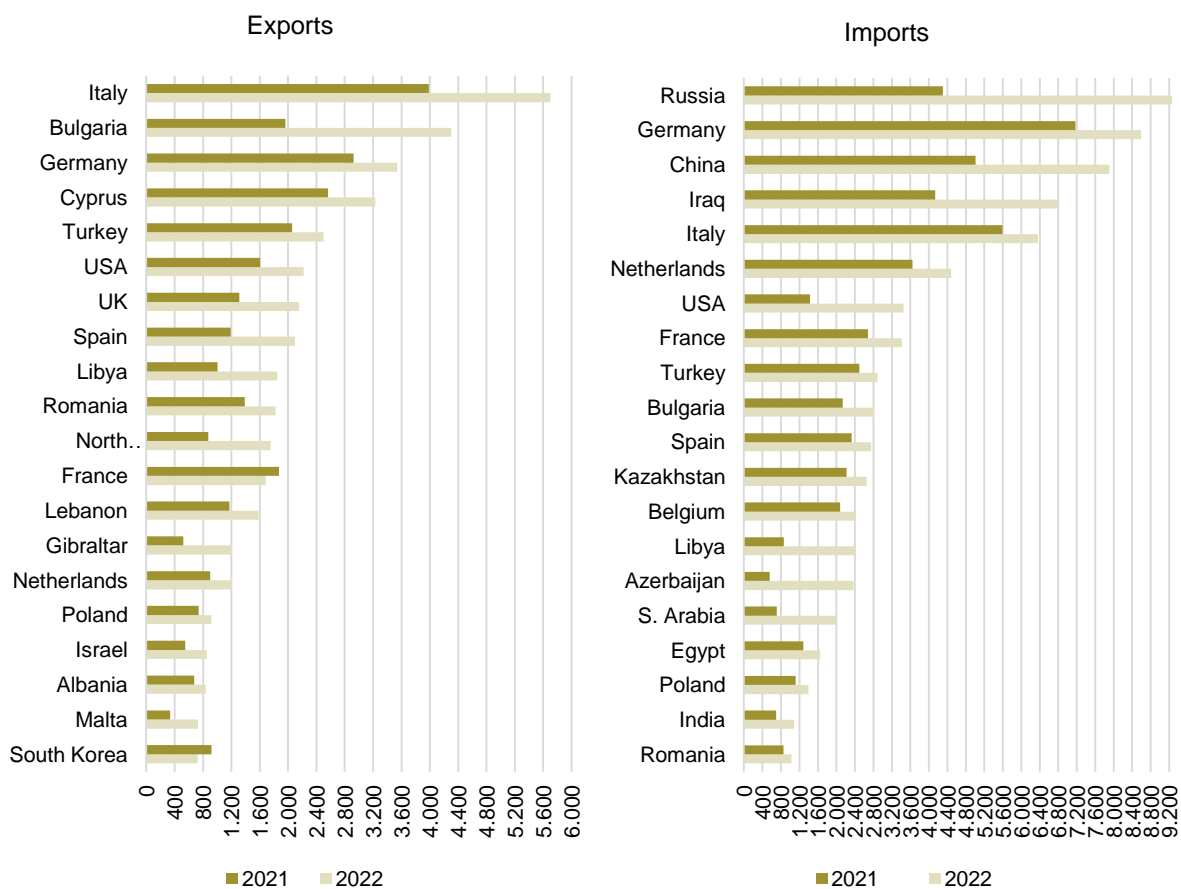
\* Provisional data

Source: Eurostat



**Figure 3.12**

Countries with the largest share in the exports and imports of Greek goods, January – December 2022  
(million €, current prices)



Source: Eurostat. Processing: IOBE

The highest growth in the exports of goods in 2022 in absolute terms was recorded in Bulgaria (+EUR 2.3 billion). Biggest drop in China (-EUR 307.7 million). Italy's share of exports remains the largest. The highest import growth in 2022 in absolute terms was from Russia (+EUR 5.0 billion), the largest decrease was from Ireland (-EUR 672.2 million).



## B. Balance of payments

- For 2022 as a whole, the current account deficit increased significantly to EUR 20.1 billion (9.7% of GDP), compared with EUR 12.3 billion (6.8% of GDP) in 2021, with all accounts except services deteriorating.
- A significant correction of the deficit in the current account was recorded in January 2023, due to improvements in the goods and the secondary income accounts.

### Current Account

#### January 2023

The current account deficit declined significantly in the first month of 2023, as it stood at -EUR 125.2 million, compared with a deficit of EUR 2.1 billion in the corresponding month of 2022. The factors leading to this de-escalation were the significant correction in the deficit of the goods account by EUR 658 million, but mainly from the strengthening of the surplus of the secondary income account by EUR 1.4 billion, due to the disbursement of the second tranche by the Recovery and Resilience Facility (RRF).

#### January – December 2022

In 2022 as a whole, the Current Account (CA) had a deficit of EUR 20.1 billion (9.7% of GDP, compared with 6.8% in 2021), up from 2021 (EUR 12.3 billion). The significant deterioration of the balance came from all accounts with the exception of services, where the surplus increased.

In greater detail, the deficit of the balance of goods stood at EUR 39.0 billion in 2022, inflated by EUR 12.3 billion compared to 2021. Exports increased to EUR 53.5 billion (EUR 14.2 billion),<sup>12</sup> with exports of fuel growing by EUR 7.4 billion and other goods expanding by EUR 6.8 billion. Imports of goods skyrocketed to EUR 92.5 billion (EUR 26.5 billion), with fuel imports increasing by EUR 14.7 billion and imports excluding oil and ships by EUR 11.5 billion. The deficit in the balance of goods excluding fuel and ships in 2022 stood at EUR 25.6 billion, higher by EUR 4.7 billion.

The surplus in the services account increased significantly in 2022 to EUR 19.4 billion, up by EUR 6.6 billion compared to 2021, while standing at 92% of its 2019 levels. Total receipts from Services stood at EUR 47.5 billion, up by EUR 12.5 billion year-on-year, while payments totalled EUR 28.1 billion, with an increase of EUR 5.9 billion. Travel receipts reached EUR 17.6 billion, up by EUR 7.1 billion compared with 2021, to 97% of their 2019 levels, while transport services reached EUR 23.4 billion, a historic record level. Finally, receipts from other services reached EUR 6.5 billion, up by 11%. Payments for travel services increased to EUR 1.9 billion (+EUR 823 million), payments for transport services increased by 30% to EUR 19.6 billion, while payments for other services reached EUR 6.6 billion, an increase of 10%.

The surplus in the primary income account turned into a deficit of EUR 240 million in 2022, compared with a surplus of EUR 369 million in 2021. Receipts increased to EUR 7.3 billion, an increase of 10%, while payments increased to EUR 7.5 billion, with an expansion of 20%.

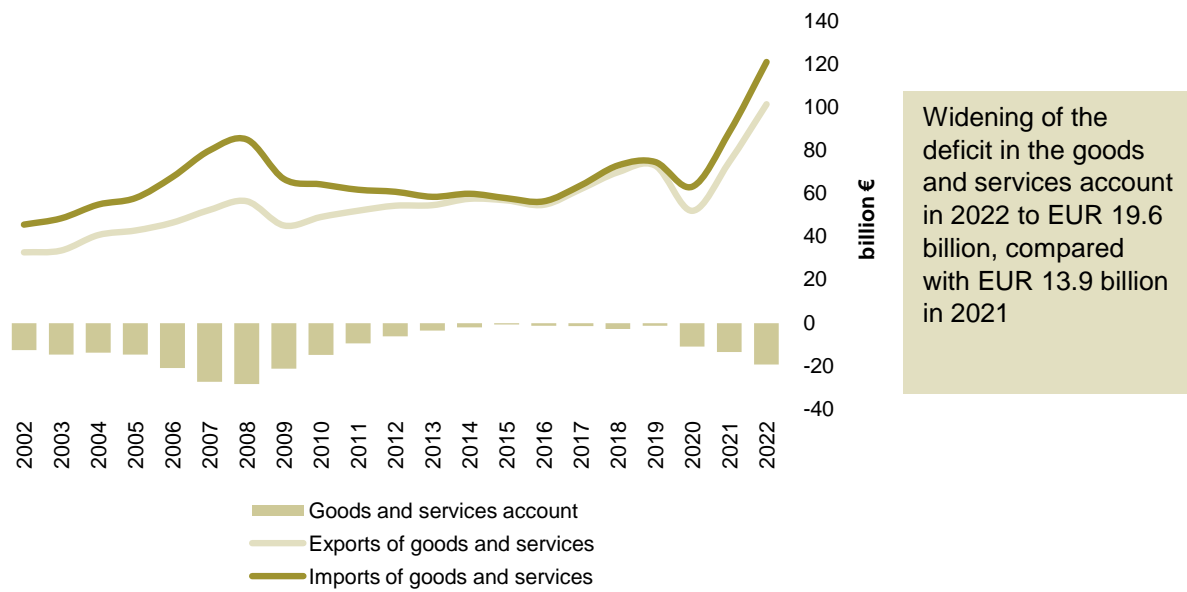
The secondary income account recorded a deficit of EUR 296 million, compared with a surplus of EUR 1.2 billion in 2021, with receipts falling to EUR 4.4 billion (-EUR 618 million), while payments increased to EUR 4.7 billion (+EUR 912 million).

#### Figure 3.13

Imports-Exports of Goods and Services (January – December), 2002-2022

<sup>12</sup> The figures in brackets express the absolute change compared to the corresponding period of the previous year, in current prices, unless otherwise stated.

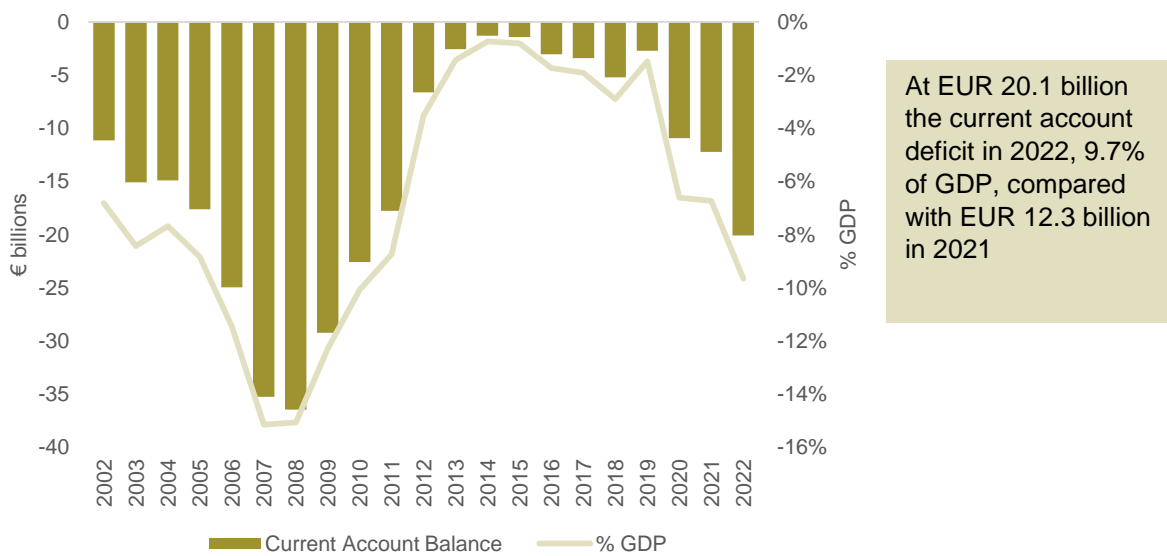




Source: Bank of Greece - Data processing IOBE

Figure 3.14

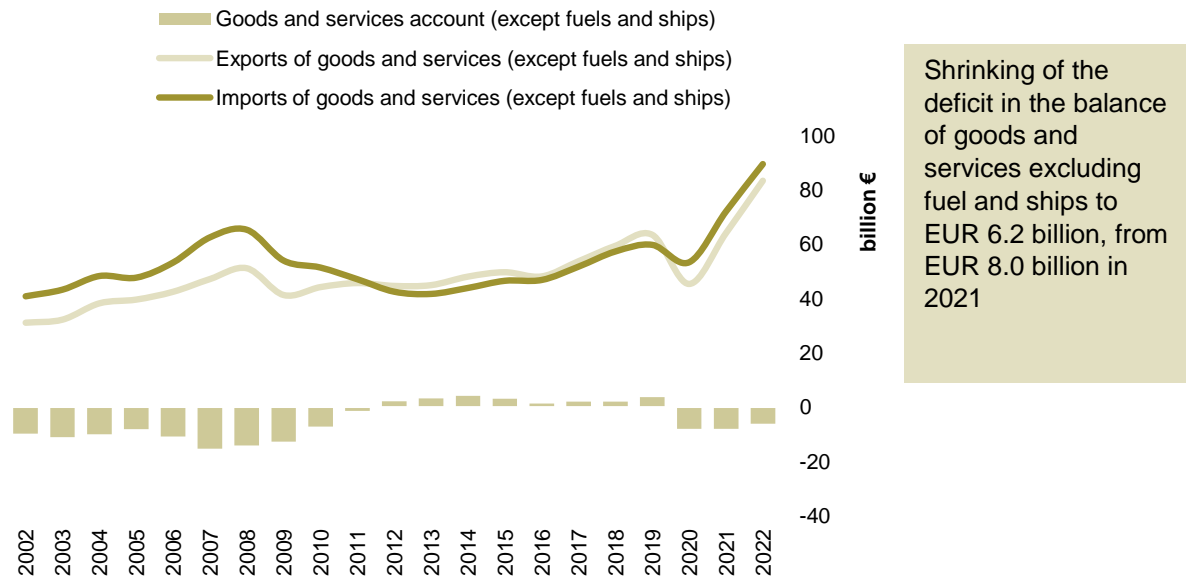
Current Account (January – December), 2002-2022



Source: Bank of Greece - Data processing IOBE

**Figure 3.15**

Imports-Exports of Goods excluding fuel and ships (January – December), 2002-2022



Source: Bank of Greece, Data processing IOBE

## Capital Account

The capital account surplus<sup>13</sup> contracted to EUR 3.1 billion in 2022, compared with EUR 4.0 billion in 2021, with a decline in receipts to EUR 3.8 billion and payments to EUR 745 million. Finally, the current and capital account, which reflects an economy's position as a lender or borrower in relation to the rest of the world, was in deficit, at EUR 17.1 billion, compared with EUR 8.3 billion in 2021.

## Financial Account

The financial account stood at a deficit of EUR 15.6 billion in 2022, compared with a deficit of EUR 7.1 billion in 2021. In the individual subaccounts, residents' net claims on direct investment abroad increased by EUR 1.8 billion, while net liabilities to non-residents (non-residents' investment in the country) strengthened by EUR 6.3 billion. Under the direct investment category, around EUR 2.0 billion corresponded to net investment in real estate, compared with EUR 1.2 billion in 2021. Under portfolio investment, residents' external assets increased by EUR 10.2 billion, mainly owing to a EUR 9.0 billion increase in holdings of foreign bonds and Treasury bills, while liabilities to non-residents strengthened by EUR 1.4 billion. Under other investment, residents' external assets decreased by EUR 3.5 billion, mainly due to a decrease of EUR 8.1 billion in deposit and repo investments, while liabilities increased by EUR 14.6 billion. Finally, the country's foreign reserves stood at the end of December 2022 at EUR 11.3 billion and at the end of January at EUR 11.8 billion.

<sup>13</sup> The capital account shows capital transfers, i.e., unilateral receipts and payments between residents and non-residents linked to fixed capital formation. Capital transfers mainly comprise part of the transfers (receipts) from the Community budget of the European Union to the General Government (withdrawals from the Structural Funds – except for the European Social Fund – and from the Cohesion Fund under the CSFs).



Table 3.8 Balance of payments (€ million)

	January – December				January		
	2020	2021	2022	2021	2022	2023	
<b>I</b>	<b>CURRENT ACCOUNT (I.A + I.B + I.C + I.D)</b>	<b>-10,964</b>	<b>-12,272</b>	<b>-20,143</b>	<b>-500.3</b>	<b>-2,119.2</b>	<b>-125.2</b>
	<b>GOODS AND SERVICES ACCOUNT (I.A + I.B)</b>	<b>-11,250</b>	<b>-13,874</b>	<b>-19,607</b>	<b>-1,338.0</b>	<b>-2,752.1</b>	<b>-2,182.7</b>
<b>I.A</b>	<b>GOODS ACCOUNT (I.A.1 - I.A.2)</b>	<b>-18,528</b>	<b>-26,719</b>	<b>-39,020</b>	<b>-1,613.7</b>	<b>-3,110.2</b>	<b>-2,451.9</b>
	Oil balance	-3,196	-5,877	-13,159	-409.6	-1,008.8	-646.8
	Trade balance excluding oil	-15,332	-20,842	-25,862	-1,204.1	-2,101.5	-1,805.1
	Ships balance	-65	-23	-293	-8.7	-17.9	3.0
	Trade balance excluding ships	-18,463	-26,696	-38,727	-1,605.0	-3,092.4	-2,454.9
	Trade balance excluding oil and ships	-15,267	-20,819	-25,568	-1,195.4	-2,083.6	-1,808.1
<b>I.A.1</b>	<b>Exports of Goods</b>	<b>28,904</b>	<b>39,328</b>	<b>53,507</b>	<b>2,460.1</b>	<b>3,364.1</b>	<b>4,386.2</b>
	Oil	6,102	10,210	17,610	482.4	922.7	1,512.9
	Ships (sales)	153	121	109	2.5	5.8	11.2
	Goods excluding oil and ships	22,649	28,996	35,789	1,975.2	2,435.6	2,862.1
<b>I.A.2</b>	<b>Imports of Goods</b>	<b>47,433</b>	<b>66,047</b>	<b>92,527</b>	<b>4,073.8</b>	<b>6,474.3</b>	<b>6,838.1</b>
	Oil	9,298	16,087	30,768	892.0	1,931.5	2,159.8
	Ships (buying)	218	144	402	11.2	23.7	8.2
	Goods excluding oil and ships	37,916	49,815	61,357	3,170.6	4,519.2	4,670.2
<b>I.B</b>	<b>SERVICES ACCOUNT (I.B.1-I.B.2)</b>	<b>7,278</b>	<b>12,845</b>	<b>19,413</b>	<b>275.8</b>	<b>358.2</b>	<b>269.2</b>
<b>I.B.1</b>	<b>Receipts</b>	<b>22,711</b>	<b>35,056</b>	<b>47,542</b>	<b>1,486.8</b>	<b>2,221.2</b>	<b>2,536.5</b>
	Travel	4,319	10,503	17,631	34.2	130.5	224.2
	Transportation	13,814	18,728	23,434	1,041.5	1,595.8	1,736.4
	Other services	4,578	5,826	6,476	411.1	494.9	575.8
<b>I.B.2</b>	<b>Payments</b>	<b>15,433</b>	<b>22,211</b>	<b>28,129</b>	<b>1,211.1</b>	<b>1,863.0</b>	<b>2,267.3</b>
	Travel	793	1,113	1,935	32.5	86.4	197.9
	Transportation	9,873	15,079	19,579	762.8	1,316.4	1,537.4
	Other services	4,767	6,020	6,615	415.7	460.2	531.9
<b>I.C</b>	<b>PRIMARY INCOME ACCOUNT (I.C.1-I.C.2)</b>	<b>-276</b>	<b>369</b>	<b>-240</b>	<b>709.2</b>	<b>485.8</b>	<b>556.2</b>
<b>I.C.1</b>	<b>Receipts</b>	<b>6,324</b>	<b>6,608</b>	<b>7,278</b>	<b>1,022.4</b>	<b>817.3</b>	<b>1,206.0</b>
	From work (wages, compensation)	201	220	225	18.3	19.8	17.5
	From investments (interest, dividends, profit)	2,942	3,019	3,581	307.6	192.8	516.2
	Other primary income	3,181	3,369	3,473	696.6	604.7	672.3
<b>I.C.2</b>	<b>Payments</b>	<b>6,600</b>	<b>6,239</b>	<b>7,518</b>	<b>313.2</b>	<b>331.6</b>	<b>649.8</b>
	From work (wages, compensation)	1,336	1,310	1,494	99.0	115.7	115.9
	From investments (interest, dividends, profit)	4,839	4,433	5,364	175.0	166.7	502.5
	Other primary income	425	496	661	39.2	49.2	31.4
<b>I.D</b>	<b>SECONDARY INCOME ACCOUNT (I.D.1-I.D.2)</b>	<b>561</b>	<b>1,234</b>	<b>-296</b>	<b>128.5</b>	<b>147.1</b>	<b>1,501.3</b>
<b>I.D.1</b>	<b>Receipts</b>	<b>4,065</b>	<b>5,008</b>	<b>4,391</b>	<b>455.4</b>	<b>540.0</b>	<b>1,819.6</b>
	General government	2,453	3,562	2,643	232.2	201.6	997.1
	Other sectors	1,612	1,446	1,748	223.2	338.5	822.6
<b>I.D.2</b>	<b>Payments</b>	<b>3,503</b>	<b>3,774</b>	<b>4,687</b>	<b>327.0</b>	<b>392.9</b>	<b>318.3</b>
	General government	1,915	2,297	3,059	222.1	278.7	178.0
	Other sectors	1,588	1,477	1,628	104.9	114.2	140.4
<b>II</b>	<b>CAPITAL ACCOUNT (II.1-II.2)</b>	<b>2,734</b>	<b>4,001</b>	<b>3,079</b>	<b>482.9</b>	<b>-221.9</b>	<b>1,443.2</b>
<b>II.1</b>	<b>Receipts</b>	<b>3,125</b>	<b>4,915</b>	<b>3,825</b>	<b>521.2</b>	<b>15.7</b>	<b>1,455.5</b>
	General government	2,932	4,055	2,491	514.9	7.1	1,281.3
	Other sectors	193	860	1,334	6.4	8.7	174.2
<b>II.2</b>	<b>Payments</b>	<b>391</b>	<b>914</b>	<b>745</b>	<b>38.4</b>	<b>237.7</b>	<b>12.3</b>
	General government	4	5	7	0.3	0.9	0.7
	Other sectors	386	909	738	38.1	236.8	11.6
	<b>BALANCE OF CURRENT AND CAPITAL ACCOUNT (I+II)</b>	<b>-8,231</b>	<b>-8,271</b>	<b>-17,064</b>	<b>-17.5</b>	<b>-2,341.1</b>	<b>1,318.0</b>
<b>III</b>	<b>FINANCIAL ACCOUNT (III.A+III.B+III.C+III.D)</b>	<b>-7,748</b>	<b>-7,108</b>	<b>-15,596</b>	<b>-540.1</b>	<b>-1,827.9</b>	<b>1,651.3</b>
<b>III.A</b>	<b>DIRECT INVESTMENT*</b>	<b>-2,332</b>	<b>-4,413</b>	<b>-4,485</b>	<b>-315.8</b>	<b>-642.4</b>	<b>-196.2</b>
	Assets	569	1,148	1,761	25.5	34.8	14.9
	Liabilities	2,901	5,560	6,246	341.4	677.2	211.1
<b>III.B</b>	<b>PORTFOLIO INVESTMENT*</b>	<b>48,340</b>	<b>23,830</b>	<b>8,837</b>	<b>3,469.9</b>	<b>835.4</b>	<b>-1,126.1</b>
	Assets	35,443	27,317	10,206	2,538.9	3,386.4	476.7
	Liabilities	-12,897	3,487	1,369	-931.0	2,551.1	1,602.8
<b>III.C</b>	<b>OTHER INVESTMENT*</b>	<b>-55,291</b>	<b>-29,061</b>	<b>-18,103</b>	<b>-3,614.7</b>	<b>-1,886.2</b>	<b>2,673.9</b>
	Assets	2,362	3,714	-3,538	201.6	-289.5	-99.7
	Liabilities	57,653	32,775	14,564	3,816.3	1,596.8	-2,773.5
	(Loans of general government)	1,343	-958	-4,496	-315.1	103.2	1,838.4
<b>III.D</b>	<b>CHANGE IN RESERVE ASSETS**</b>	<b>1,536</b>	<b>2,536</b>	<b>-1,845</b>	<b>-79.5</b>	<b>-134.6</b>	<b>299.7</b>
<b>IV</b>	<b>BALANCE ITEMS (I +II +IV +V = 0)</b>	<b>483</b>	<b>1,163</b>	<b>1,468</b>	<b>-522.6</b>	<b>513.2</b>	<b>333.3</b>
	<b>RESERVE ASSETS (STOCK)***</b>				<b>9,672</b>	<b>12,678</b>	<b>11,809</b>

Source: Bank of Greece

\* (+) Increase (-) decrease - According to the new balance of payments methodology training BPM6, increases in demand are presented with a positive sign while the decrease in receivables is displayed with a negative sign. Similarly, the increase in liabilities is captured with a positive sign, while the reduction of liabilities with a negative sign. \*\* (+) Increase (-) decrease - According to the new balance of payments methodology training BPM6, the increase in foreign reserves is now presented with a positive sign, while the reduction of foreign exchange reserves with a negative sign. \*\*\* Reserve assets, as defined by the European Central Bank, include only monetary gold, the "reserve position" in the IMF, "Special Drawing Rights" and the claims of the Bank of Greece in foreign currency from residents of countries outside the euro area. Conversely, they do not include claims in euro from residents of countries outside the euro area, claims in foreign currency and in euros from residents of euro area countries and the participation of the Bank of Greece in the capital and the reserve assets of the ECB.

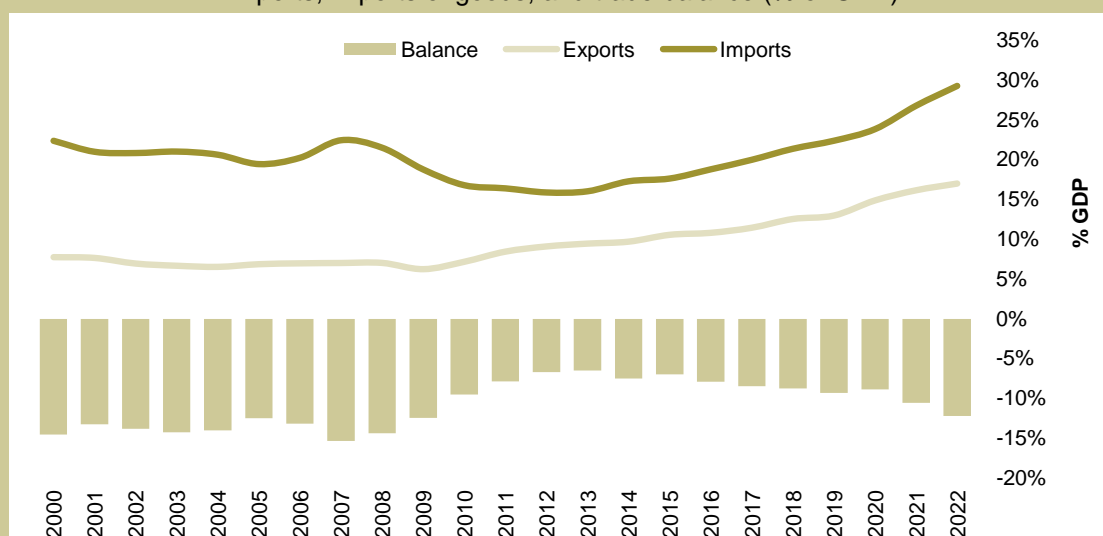
**Box 3.3**

## Trade deficit and qualitative characteristics of imports and exports in 2022

Following the liberalisation of capital flows, the gradual rise of globalisation, and the decline in competitiveness, the Greek economy showed a significant increase in the current trade deficit, which peaked in 2008 at EUR 36.5 billion, at current prices (15.1% of GDP). This deficit was mainly fuelled by the goods account, with a deficit of EUR 44 billion in 2008 at 18.3% of GDP. Following the decline in subsequent years, in 2022 the deficit in the balance of goods returned to the same level as a percentage of GDP, at 18.4% (EUR 38.4 billion). In absolute terms, the exports of goods stood at EUR 21.2 billion in 2008, compared with EUR 65.5 billion for the imports of goods, while in 2022 the corresponding amounts were EUR 54.7 billion and EUR 93.0 billion respectively.

**Figure B.3.3.1**

Exports, imports of goods, and trade balance (% of GDP)



Source: Eurostat

The Greek economy faced significant challenges during this period (2008-2022), initially due to the global financial crisis of 2008, but also recently due to the pandemic and the ensuing energy crisis. However, the most significant change in the Greek economy came from the implementation of the adjustment programmes after 2010, in an attempt to reduce the twin (fiscal and trade) deficits, improve competitiveness, and change the production growth model. The return of the deficit to 2008 levels raises the question of whether Greece has evolved over the past years, whether it has changed its production model, and whether the re-establishment of the deficit is a cyclical or structural phenomenon.

The data on imports and exports of goods by broad category<sup>14</sup> i.e. consumer, capital and intermediate goods, can reveal the structure of trade flows per year. The analysis concerns the years 2008, i.e. the year of the peak of the external deficit before the Greek crisis, 2019, one year after the end of the adjustment programmes and before the start of the pandemic, and 2022, to highlight potential changes brought about by the pandemic and the energy crisis.

Between 2008 and 2019, the share in the consumer goods category did not change, at about 28% of total imports, yet it fell by 2022 to about 22%. This decline stems mainly from non-durable but also semi-durable consumer goods, as well as from food and beverages.

<sup>14</sup> Based on the Classification by Broad Economic Categories (BEC): capital goods (machinery, transport equipment), consumer goods (food, drinks for consumption, durable, semi-durable, and non-durable consumer goods, transport equipment for non-industrial use).

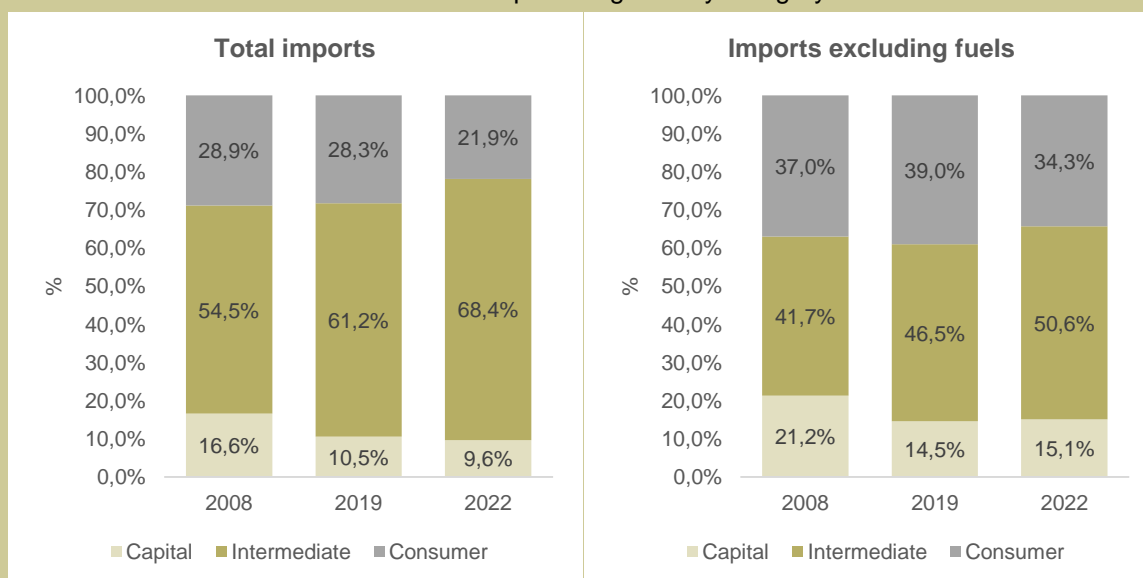


A significant share of imports is made up of intermediate goods, which include industrial supplies, parts, and fuels, with the relative share in 2008 at 54.5%, i.e. more than half of imports in value, while an increase is recorded by 2019 to 61.2% and a corresponding jump until 2022 to 68.4%. From 2008 to 2019, the subcategory of fuel and industrial supplies strengthened, while by 2022 the share of fuel increased further, with a slight drop in the share of supplies.

In capital goods, the relative share in import value decreased from 16.6% in 2008 to 10.5% in 2019, with a further weakening in 2022 to 9.6%. The decline between 2008 and 2019 came from a large decline in transport equipment for industry and a decrease in the share of capital goods (machinery, etc.). The decline in the import share of machinery continued until 2022, while conversely, there was an increase in transport equipment.

**Figure B.3.3.2**

Structure of imports of goods by category



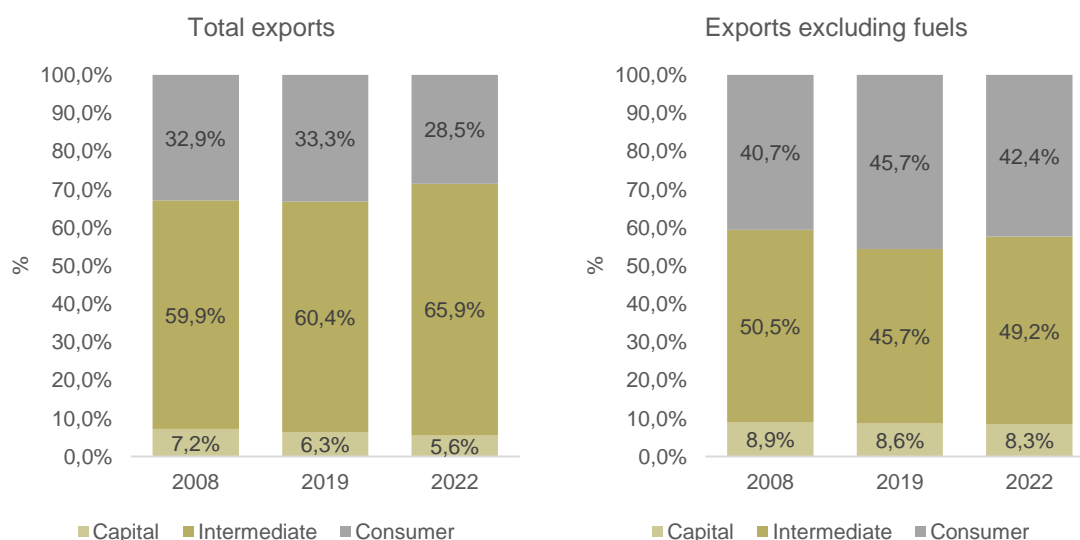
Source: Eurostat, International Trade by BEC, Data processing IOBE

All of the above should take into account the fact that the category of passenger cars is not included, with a strong presence in imports and a correspondingly significant decline during this period, as they cannot be categorised as passenger cars for consumer or other purposes.

Excluding the fuel category, which is included in intermediate goods, between 2008-2019 consumer goods recorded an increase in their share, from food and semi-durable goods, but with a significant decline until 2022, from all categories and mainly non-durable consumer goods. There was a significant increase in intermediate goods up to 2019, due to the strengthening of industrial supplies, while a further boost was recorded by 2022 from the same category and an increase in the share of machinery components. In capital goods, the share of transport equipment had a strong drop until 2019, while by 2022 the share of transport equipment increased, resulting in an overall increase of the category to 15.1%.

**Figure B.3.3.3**

Composition of the exports of goods by category



Source: Eurostat, International Trade by BEC, Data processing IOBE

On the export side, the share of consumer goods remained stable between 2008 and 2019, but it fell to 28.5% in 2022. The decline stemmed mainly from non-durable goods, while a decline was also recorded in semi-durable goods and food.

In intermediate goods, the share increased until 2022, mainly from fuel. Between 2008 and 2019, the share remained almost stable, but with internal shifts between the sub-categories, as there was a significant drop in the export share of industrial supplies, which was offset by an increase in refined fuels. The further increase until 2022 came from crude fuels.

The share of the exports of capital goods has fallen since 2008, to 6.3% in 2019, decreasing further to 5.6% in 2022. Until 2019, a decrease was recorded in the share of the exports of transport equipment for industry, which was partly offset by an increase in the share of capital goods, while until 2022 there was a slight decline in both categories.

Excluding fuels, which to some extent alter the relative shares due to their volatile prices, as the figures are recorded in values, the share of consumer goods was clearly higher, at 42.4% in 2022, with a drop compared to 2019, following an increase between 2008 and 2019. The rise until 2019 was driven by a strengthening of non-durable goods and food, while the weakening until 2022 was mainly driven by non-durable and semi-durable goods, with a further increase in food. In intermediate goods, there was a decline until 2019 with a return in 2022 close to 2008 levels. The initial decline stemmed from a decline in the share of exports of industrial supplies, while by 2022 there was a small or a large increase in almost all subcategories, mainly industrial supplies. Finally, capital goods gradually declined with a reduction in the share of transport equipment, partly compensated by the remaining categories, while until 2022 a marginal decrease was recorded in both categories.

The structure of the Greek economy and its size lead to the conclusion that it continues to import a large part of goods, both for consumer purposes and to support the operation of domestic activity, while the question remains whether the mixture of these goods has changed over time. Summarising the above results, there is a decline in the share of imports of consumer goods and in the share of capital goods since 2008, with a corresponding increase in the intermediate goods category, while excluding fuel there is a recovery in the share of capital goods after 2019. On the export side, there is a decline in the share of consumer goods and a strengthening of intermediate goods, which, however, is largely due to fuel. In exports excluding fuel, the shares in 2022 resemble those of 2008, after an increase in the share of exports of consumer goods (especially non-durable goods and food) during the adjustment programmes. In conclusion, over the past 15 years, the Greek economy has reduced the shares of consumer and capital goods in its trade flows, especially in imports, while strengthening the share of intermediate goods. These trends may reflect a gradually stronger presence in global value chains, importing and producing intermediate goods, with the prospect of the Greek economy increasing its value added generated in this process.









### 3.4 Labour market

- Decrease in the unemployment rate in 2022 to 12.4% from 14.7% in 2021. The strongest decrease since 2014 (by 2.3 percentage points).
- The entry-exit balance was positive by 72,900 people in 2022 but lower than the positive 2021 balance (+133,100).
- Higher employment growth in 2022 in tourism (+52,200 employed), education (+32,300), manufacturing (+22,900), and wholesale-retail trade (+19,900).
- A stronger fall in employment in 2022 in public administration (-10,300 employed) and in transport-storage (-4,000).
- Increase in the seasonally adjusted wage cost index in 2022 by 1.5% compared to 2021.

According to ELSTAT's Labour Force Survey, in 2022 the unemployment rate in Greece decreased for the ninth consecutive year to 12.4% from 14.7% in 2021, posting its strongest drop since 2014, by 2.3 percentage points. The decline in unemployment was mainly the result of an increase in employment (+221,600 employed or +5.4%, from 3,928,000 to 4,140,600) and less from a decrease in the number of unemployed (-89,500 or -14.2%, from 667,700 to 588,200). Overall, the labour force increased by 123,100 people (or 2.7%, to 4,728,800 from 4,605,700) while the inactive population decreased by 80,600 (or 1.8%, to 4,321,300 from 4,401,900). It should be noted that in February this year, the non-seasonally adjusted unemployment rate fell to 11.5% from 13.6% in the same month of 2022 (down by 2.1 percentage points).

According to ERGANI data, in 2022 as well the net employment change was positive by 72,900 but lower than in 2021 (+133,100) since the increase in hires (+21.5%, from 2,395,400 in 2021 to 2,911,300 in 2022) was lower than the increase in departures (+25.5%, from 2,262,400 to 2,838,500). In the latter, the highest percentage is taken up by contract terminations (1,734,000 in 2022 from 1,287,000 in 2021), followed by voluntary resignations (1,104,400 from 975,300). In January 2023, the net employment change was negative at 27,600 (186,300 hires and 213,900 exits) compared with a negative balance of 25,800 in the same month of 2022 (188,000 hires and 163,800 terminations).

Regarding the evolution of unemployment in the euro area, all member countries experienced a decrease. After Greece, the strongest drop in the unemployment rate was recorded in Spain and Ireland. In the first country, with the highest unemployment rate in the euro area in 2022, it fell by 1.8 percentage points, i.e. to 13.0% from 14.8% in 2021, while in the second the decrease was the same – 1.8 percentage points – and unemployment contracted from 6.3% to 4.5%. The fall in the unemployment rate was similar in Austria (-1.5 percentage points, from 6.2% to 4.8%) and Italy (-1.4 percentage points, to 8.1% from 9.5%). The lowest unemployment rates and their mildest decline in 2022 were recorded in Malta, Germany, and the Netherlands. In the first country, unemployment fell to 2.9% in 2022 from 3.4% in 2021 (-0.5 percentage points), in Germany to 3.1% from 3.6% (-0.5 percentage points) and in the Netherlands to 3.5% from 4.2% (-0.7 percentage points). Finally, in the other major euro area economy, France, unemployment fell to 7.3% from 7.9% (-0.6 percentage points), while in the euro area as a whole it stood at 6.7% in 2022 from 7.7% a year earlier (-1.0 percentage points).

Regarding the evolution of the unemployment rate by gender in Greece, the decline was stronger among women than men, but in the latter, it remained at a lower level. Among women, unemployment fell by 2.6 percentage points, to 16.4% in 2022 from 19.0% in 2021. For men in 2022, the unemployment rate was 7.1 percentage points lower than that of women, down to 9.3% from 11.4% (-2.1 percentage points). In the euro area, the unemployment rate for women fell to 7.2% from 8.1% (-0.9 percentage points) and for men to 6.4% from 7.4% (-1.0 percentage points).



With regard to the evolution of the age-based unemployment rate, as repeatedly reported, it decreases as age increases, while in 2022 it decreased across all age categories. The strongest drop in the unemployment rate was found in people aged 20-24 (-4.8 percentage points) and 25-29 (-4.7 percentage points). In the first, it dropped to 29.2% in 2022 from 34.0% in 2021, while in the latter from 25.2% to 20.5%. The highest unemployment rate last year was recorded in the 15-19-year-old age group, which stood at 48.7% from 49.7% a year ago, while the lowest unemployment rates in 2022 were observed in the age groups of over 65 (7.8% from 7.9%) and 45-64 years old (from 10.9% to 9.0%).

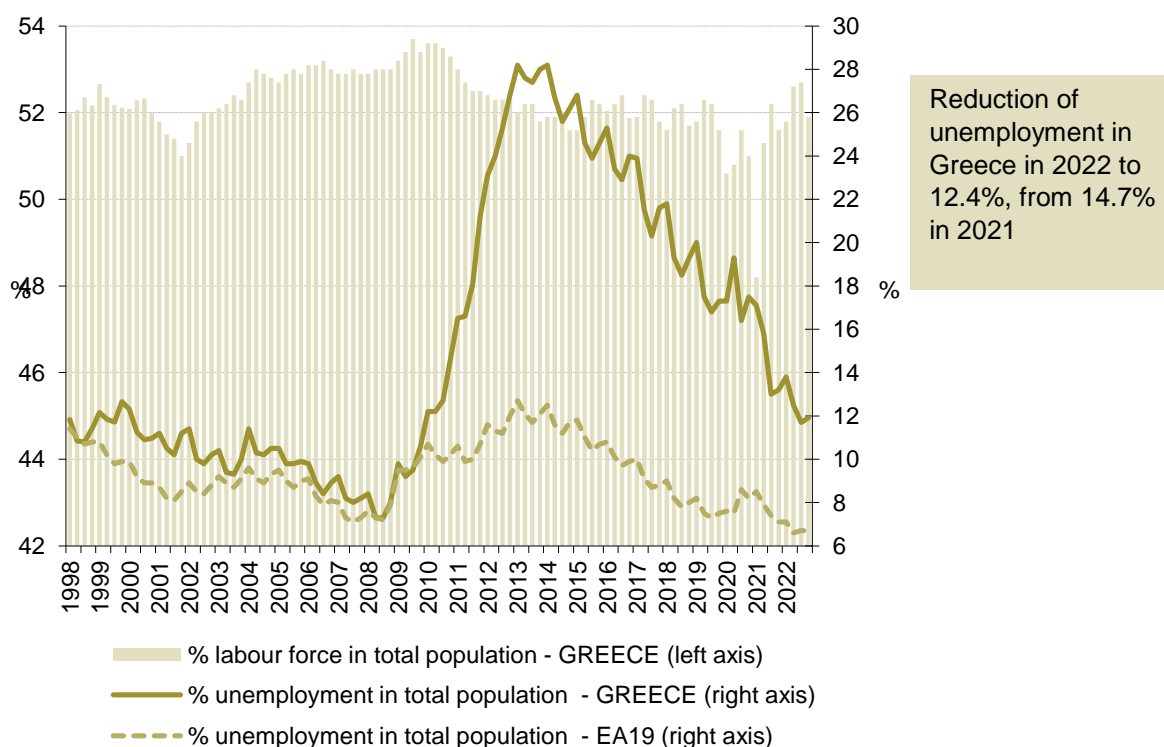
In relation to the duration of unemployment, both the number and the share of long-term unemployed decreased in 2022. The number of long-term unemployed decreased by 14.7% or 62,900, i.e. to 363,900 from 426,900 in 2021, while at the same time, the long-term unemployment rate declined to 62.0% from 62.6% (-0.6 percentage points).

As regards the evolution of the unemployment rate based on the level of education, it decreases as the level of education increases, while in 2022 it decreased for all levels of education. The highest unemployment rate and its strongest decline in 2022 were seen among people who attended some grades of primary school or did not go to school at all, as the rate fell to 32.9% from 39.6% in 2021 (-6.7 percentage points). The second highest unemployment rate was found among those with a high school diploma where it fell to 15.2% in 2022 from 17.2% a year earlier (-2.0 percentage points), while by contrast the lowest unemployment rate was observed among people with a doctoral or postgraduate degree, where it stood at 5.5%, from 7.1% (-1.6 percentage points). This is followed by the unemployment rate among tertiary education graduates where it shrank to 9.5% from 12.2%, the second strongest drop among the different categories of education in 2022 (-2.7 percentage points). Finally, the fall in the unemployment rate was similar among people with a higher technical vocational education degree (-2.3 percentage points) and with a secondary education diploma (-2.4 percentage points). In the first, the unemployment rate stood at 12.4% from 14.7%, and in the second at 14.4% from 16.8%.

Regarding the trends in the regional dimension of unemployment, the unemployment rate decreased in 2022 in all regions. Its strongest decline was recorded in the South Aegean, where it declined by 7.6 percentage points, to 11.1% from 18.7% in 2021. It fell by 4.9 and 4.3 percentage points in the regions of Western Greece and Crete respectively, as in the first it fell to 12.6% from 17.5% and in the second to 12.1% from 16.4%. The lowest unemployment rate was found in Attica, where it stood at 10.0% in 2022 from 11.9% in 2021 (-1.9 percentage points), while the highest was recorded in Western Macedonia, where it fell to 17.7% from 19.8% (-2.1 percentage points). Western Macedonia is followed by the regions of Thessaly and Eastern Macedonia-Thrace. In the first, the unemployment rate decreased to 16.3% from 16.7% (-0.4 percentage points) and in the second to 14.7% in 2022 from 18.6% in 2021 (-3.9 percentage points). Finally, in Central Macedonia unemployment fell to 14.7% from 16.2% in 2021 (-1.5 percentage points), while in the Peloponnese it decreased marginally to 12.6% from 12.7% (-0.1 percentage points).

### Figure 3.16

Labour force participation and unemployment rates



Sources: ELSTAT – Labour Force Survey, Eurostat

As regards the evolution of employment on the basis of occupational status, employment increased in two categories and declined in one. The strongest growth in 2022 was recorded in the most populous category of salaried employees, where employment rose by 7.7% or 206,300 people, reaching 2,884,200 from 2,677,900 in 2021. The number of unpaid family workers increased to 127,900 from 119,200 (+7.3% or +8,800), while the number of self-employed marginally fell, by 0.2% or 2,400, to 1,128,600 from 1,130,900.

In relation to the evolution of employment per occupation, all occupations showed an increase in employment in 2022 compared to 2021, except for technicians, technical assistants and related professions (-10,200 employed or -3.3%, from 309,100 to 298,900). The strongest rise in absolute terms was recorded in persons practising scientific, artistic and related professions as their number increased by 80,500 or 9.8%, to 904,700 from 824,200. Next came the persons employed in the provision of services and sellers in shops and outdoor markets, with their number growing to 907,400 from 868,500 (+38,900 employed or +4.5%) as well as unskilled and manual workers, with their number reaching 278,500 from 256,800 (+21,700 employed or +8.5%). By contrast, the mildest increase in employment was observed in unclassified persons (+7,000 employed, from 65,300 to 72,300) and skilled farmers, foresters, and fishermen (+8,500 employed, from 414,600 to 423,100).

On the basis of employment status, both full- and part-time employment increased. Full-time employment increased in 2022 by 198,900 or 5.5%, to reach 3,797,600 from 3,598,800 people in 2021, while part-time employment went up by 11,900 or 3.7% to 336,100 from 324,200.

Regarding the employment trend in key sectors, all saw growth in 2022 compared to 2021. In absolute terms, the strongest growth in employment took place in the tertiary sector, where the number of employees increased by 663,500 (or by 5.2%) to 3,031,100 from 2,880,900, followed by the Secondary sector, where the number of employees stood at 663,500 from 600,100 (+43,400 or +7.2%), followed by the Primary sector where the number of employees reached 461,500 in 2022 from 446,000 one year earlier (+15,400 or +3.5%).



At the level of economic activity, employment increased in 17 sectors and declined in four. In absolute terms, the strongest growth was observed in accommodation - food services, where employment increased by 52,200 people, i.e. from 324,500 in 2021 to 376,700 in 2022 (+16.1%). Next came education and manufacturing. In the first, employment increased by 32,300 or 10.3% (from 312,100 to 344,400) and in the second by 22,900 or 5.9% (to 412,900 from 390,000). In wholesale - retail trade - repair of motor vehicles and motorcycles, employment in the same period increased by 19,900 people (from 696,900 to 716,700, +2.8%), while similar growth was recorded in water supply (+15,700 employed, from 21,600 to 37,300) and in the Primary sector (+15,400 employed, to 461,500 from 446,000). By contrast, the strongest reduction in employment in 2021-2022 was recorded in public administration - defence-compulsory social security, by 10,300 people (from 383,900 employed in 2021 to 373,600 in 2022, down by 2.7%). Milder was the decline in employment in transport-storage (-4,000 persons or -1.9%, from 208,300 to 204,400) and electricity - gas -steam - air conditioning (-3,000 persons or -8.3%, from 35,600 to 32,700).

In conclusion, employment data at the sectoral level show that its rise in 2022 compared to 2021 was mainly driven by its rise in the following sectors:

- Tourism (+52,200 employed), related to the rise in international arrivals at the country's main airports by 82.3% or 9.68 million (from 11.8 million in 2021 to 21.5 million in 2022) as well as tourism receipts by 67.9% or EUR 7.1 billion (from EUR 10.5 billion to EUR 17.6 billion, at current prices)
- Education (+36,600)
- Manufacturing (+22,900), in line with the rise in the working-day-adjusted industrial production index by 2.3% (from 116.0 points in 2021 to 118.6 points in 2022) and the industrial turnover index by 33.2% (from 126.2 points to 168.1);
- Wholesale-retail trade (+19,900), related to the rise in seasonally adjusted indicators of turnover (+12.4%, from 110.1 to 123.8 points) and volume in retail trade (+3.0%, from 109.2 to 112.5 points), and in the wholesale turnover index (+21.5%, from 116.7 to 141.8 points);

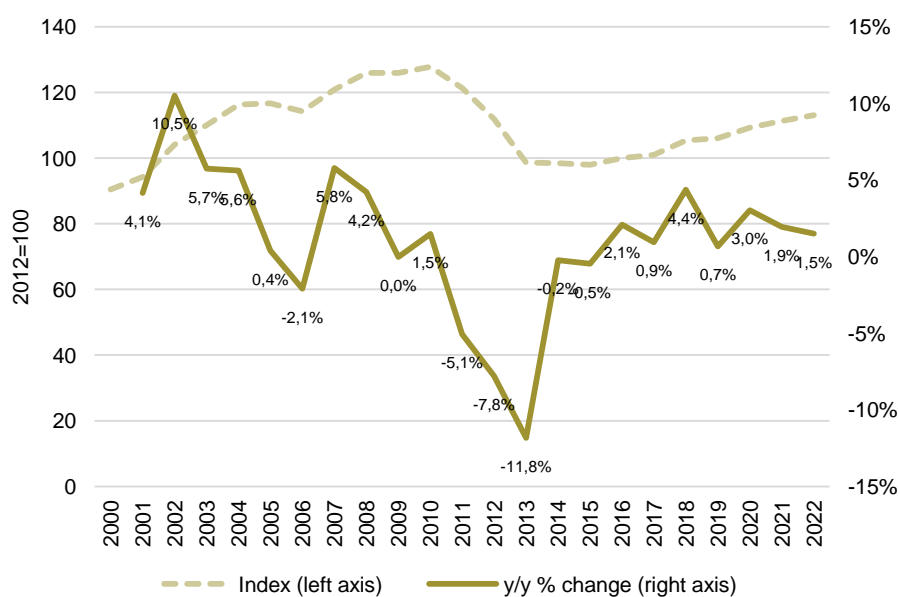
despite the decline of employment in public administration by 10,300 employees and in transport-storage by 4,000.

The seasonally adjusted wage cost index overall in the Greek economy increased for the seventh consecutive year, reaching 113.0 points from 111.4 in 2021 (+1.5%) and 109.2 in 2020.



Figure 3.17

Seasonally adjusted wage cost index and its percentage change



Increase in the seasonally adjusted wage cost ratio in 2022 by 1.5% compared to 2021.

Sources: ELSTAT

Table 3.9

Population aged 15 years and over by employment status (in thousands)

Reference period	Total	% of Population	Employed	Percentage (%) of the labour force	Unemployed	Percentage (%) of the labour force
2015	9,246.6	52.0	3,610.7	75.1	1,197.0	24.9
2016	9,212.8	52.1	3,673.6	76.5	1,130.9	23.5
2017	9,176.9	52.1	3,752.7	78.6	1,027.1	21.5
2018	9,140.2	51.9	3,828.0	80.7	915.0	19.3
2019	9,103.5	52.0	3,911.0	82.7	818.9	17.3
Q1 2020	9,083.8	50.6	3,852.6	83.8	745.1	16.2
Q2 2020	9,080.5	50.8	3,844.0	83.3	768.3	16.7
Q3 2020	9,077.3	51.6	3,926.8	83.8	756.4	16.2
Q4 2020	9,074.2	51.0	3,878.5	83.8	750.1	16.2
2020	9,079.0	51.0	3,878.5	83.7	755.0	16.3
Q1 2021	9,070.8	48.2	3,625.1	82.9	745.4	17.1
Q2 2021	9,067.1	51.3	3,915.3	84.2	732.5	15.8
Q3 2021	9,063.5	52.2	4,118.3	87.0	615.4	13.0
Q4 2021	9,060.0	51.6	4,053.3	86.8	617.4	13.2
2021	9,065.4	50.8	3,928.0	85.2	677.7	14.7
Q1 2022	9,055.8	51.8	4,044.0	86.2	647.2	13.8
Q2 2022	9,051.9	52.6	4,167.2	87.6	591.6	12.4
Q3 2022	9,048.2	52.7	4,216.0	88.4	555.6	11.6
Q4 2022	9,044.7	51.9	4,135.2	88.1	558.4	11.9
2022	9,050.2	52.3	4,140.6	87.6	588.2	12.4

Source: ELSTAT, Labour Force Survey

### Medium-term outlook

The recent deadly train accident in Tempi resulted in the postponement of the parliamentary elections from the initially estimated time of early April of this year to late May. However, as mentioned in previous reports by IOBE, the current electoral law provides for the application of simple proportionality and therefore the chances of holding re-elections (in early July) are high, with corresponding effects on the functioning of the economy and consequently on employment. At the same time, the war in Ukraine is ongoing and is expected to continue for at least most of this year, with corresponding negative – but less pronounced – effects on energy costs. Note that gas prices have already decreased significantly compared to the very high prices recorded in August 2022; various factors contributed to this such as the imposition of a cap on its price by the European Union, high temperatures that led to a decrease in the demand for heating, securing of alternative sources of supply in the European Union, etc. In relation to heating oil, its sales price has decreased compared to October 2022, while there is also a discount provided through state subsidy, lowered from EUR 0.25 to EUR 0.15 per litre and expiring on 31 March, as the international price of oil has declined. However, with the start of winter energy costs are expected to increase due to demand growth and measures to support households and businesses are likely to be strengthened.

As regards the employment situation this year, it will be influenced first of all by tourism. As mentioned above, international arrivals at the country's main airports in 2022 (21.5 million) were 82.3% higher than in 2021 (11.8 million) and only 47,100 fewer than in 2019 (21.5 million), which was a record year for Greek tourism. At the same time, travel revenue (current prices) amounted to EUR 17.6 billion in 2022, i.e. EUR 7.1 billion or 67.9% higher than in 2021 (EUR 10.5 billion) and 3.0% lower than in 2019 (EUR 18.2 billion). This momentum is expected to continue in 2023 as the Ministry of Tourism expects tourism to grow by 20% this year. In this regard, visitors in January 2023 (294,200) increased by 48.9% or 96,600 people compared with January 2022 (197,500) and travel receipts by 71.9% or EUR 93.8 million (from EUR 130.5 million to EUR 224.2 million). It should be noted, however, that part of the employment in this sector is expected to be legally filled by third-country nationals – in order to fill vacancies that this year are expected to reach 75-80,000 – as a recent ministerial decision included tourism among the sectors that can accept third-country nationals for work.

Exports of goods are expected to rise in 2023 – with similar positive effects on employment – but much milder than in 2022, due to a significant slowdown in the recovery in the euro area and the European Union (+0.8% in the European Union and +0.9% in the euro area, according to the latest report by the European Commission, from growth of 3.6% and 3.5% respectively in 2022) and inflation pressures that will persist in 2023 but with lower intensity than in 2022 (inflation forecasts of 6.4% in the European Union and 5.6% in the euro area according to the European Commission, from inflation of 9.2% and 8.4% respectively in 2022). As of January 2023, exports without fuel and ships (current prices) increased by 17.5% compared to the same month of 2022 (to EUR 2.86 billion from EUR 2.44 billion), while with fuel and ships the corresponding increase stood at 30.4% (from EUR 3.36 billion to EUR 4.39 billion).

Consumption is expected to increase moderately in 2023 (+1.5% according to IOBE forecasts) with similar positive effects on the employment of the respective sectors. That said, it will be negatively affected by high inflation, albeit lower compared to 2022 in Greece (inflation forecast of 4.3% in 2023 according to IOBE, down from 9.7% in 2022). At the same time, household and corporate disposable income will be further hit by an increase in borrowing costs (current and new) as a result of the expected further rise in ECB interest rates. Interest rates have already risen six times since July 2022, with the latest increase by 50 basis points taking place on 16 March. However, these negative effects will be offset by measures to support households and businesses to address inflation and energy costs, as well as by a new increase in the minimum wage from 1 April 2023 to EUR 780 from EUR 713 (+9.4%) leading to an increase in unemployment benefits as well. Having said that, the new increase in the minimum wage will mainly affect companies in sectors in which a large proportion of workers are paid the minimum wage. This increase, coupled with higher energy costs, is likely to put strong pressure on some of these enterprises with the possibility of favouring other than full-time employment regimes, e.g. part-time work, while redundancies, as well as legally filling the necessary jobs by third-country nationals, are also possible.





Investment growth will have a positive impact on employment, but it is expected to be milder. Positive effects will come from the use of the resources of the recovery fund. It should be noted that the second tranche of EUR 3.56 billion was approved by the European Commission in January, bringing the total amount of payments together with the pre-financing (August 2021) and the first payment (April 2022) to EUR 11.08 billion, while the total public expenditure for 267 ongoing tenders at the end of March 2023 amounts to EUR 3.37 billion. At the same time, positive effects will come from the gradual maturation of major infrastructure projects (Ellinikon, metro, motorways). However, inflation (lower than in 2022) and the increase in interest rates by the ECB will act as a deterrent to investment risk, but not as strongly as in previous years.

As regards the contribution of the public sector to employment in 2023, data to date indicate that this will come from the planned recruitment of regular (14,500 permanent recruitments) and temporary staff (2,700 positions) in the public sector. In relation to public-benefit employment, the only ongoing programme, which concerns 25,000 jobs in local authorities, where the beneficiaries' eight-month contracts were set to expire in January-February 2023, was extended in mid-February for another four months. In addition, the public employment service (DYPA) is expected to launch three new programmes for 38,000 unemployed in the coming period (end of March, early April) in support of enterprises with a focus on the employment of women in the green economy (5,000 people aged 18-66), upskilling, reskilling, short-term employment (15,000 unemployed people aged 25-45) and advisory, certified training, employment and entrepreneurship (18,000 unemployed).

Taking into account the above effects on the labour market, IOBE's forecast is for better performance compared to the previous report. Thus, the unemployment rate in 2023 is expected to stand at 11.0% from an earlier forecast of 11.5%.

According to IOBE's latest business and consumer surveys, in the January-March 2023 quarter, there was a significant improvement compared to the fourth quarter of the previous year in the short-term employment expectations in construction and services, with the expectations in industry and retail trade strengthening more moderately. Compared to the same period of 2022, there was a marked improvement in construction and a marginal increase in industry and retail trade, while in Services there was a marginal decline. In more detail:

In Industry, the average balance for the first quarter of this year strengthened mildly from the previous quarter to +12 points. Compared to last year's performance, the average quarterly index is about 1 point lower. In the quarter under review, the percentage of industrial enterprises expecting a decline in employment in the coming period declined slightly to 10%, from 16% in the previous quarter, while at the same time, the proportion of those who expect an increase in the number of jobs increased to 21% (from 17%). However, a large majority of firms in the sector (69%) foresee no change in employment.

In Construction, the relevant expectations point to a significant improvement in the sector's employment balance, which strengthened significantly from +18 points to +48 points. In the quarter under review, 13% (from 26%) of the firms in the sector were expecting fewer jobs, while the proportion of respondents expecting employment to rise improved significantly to 61% (from 44%). At the level of sub-sectors, there is a significant improvement in the relative indicator in private construction (+34 from -3 points) and in public works (+63 from 39 points).

The employment expectations in retail trade improved slightly in the first quarter of this year compared to the immediately preceding quarter, to +28 (from +20) points, marginally higher than in 2022 (+24). Only 1% of the firms in the sector were expecting jobs to fall, from 4% in the previous quarter, while 29% (from 24%) were anticipating employment growth, with those expecting stability moving to 70% (from 72%) of the total. In the individual examined sectors, there is a significant improvement in the relative balance in department stores, food-beverages, and household equipment, and a marginal boost in vehicles-parts, while, by contrast, mild weakening is observed in textile-clothing-footwear.

In Services, the employment expectations in the quarter under review point to a significant improvement compared with the previous quarter, and a marginal decline compared with the same



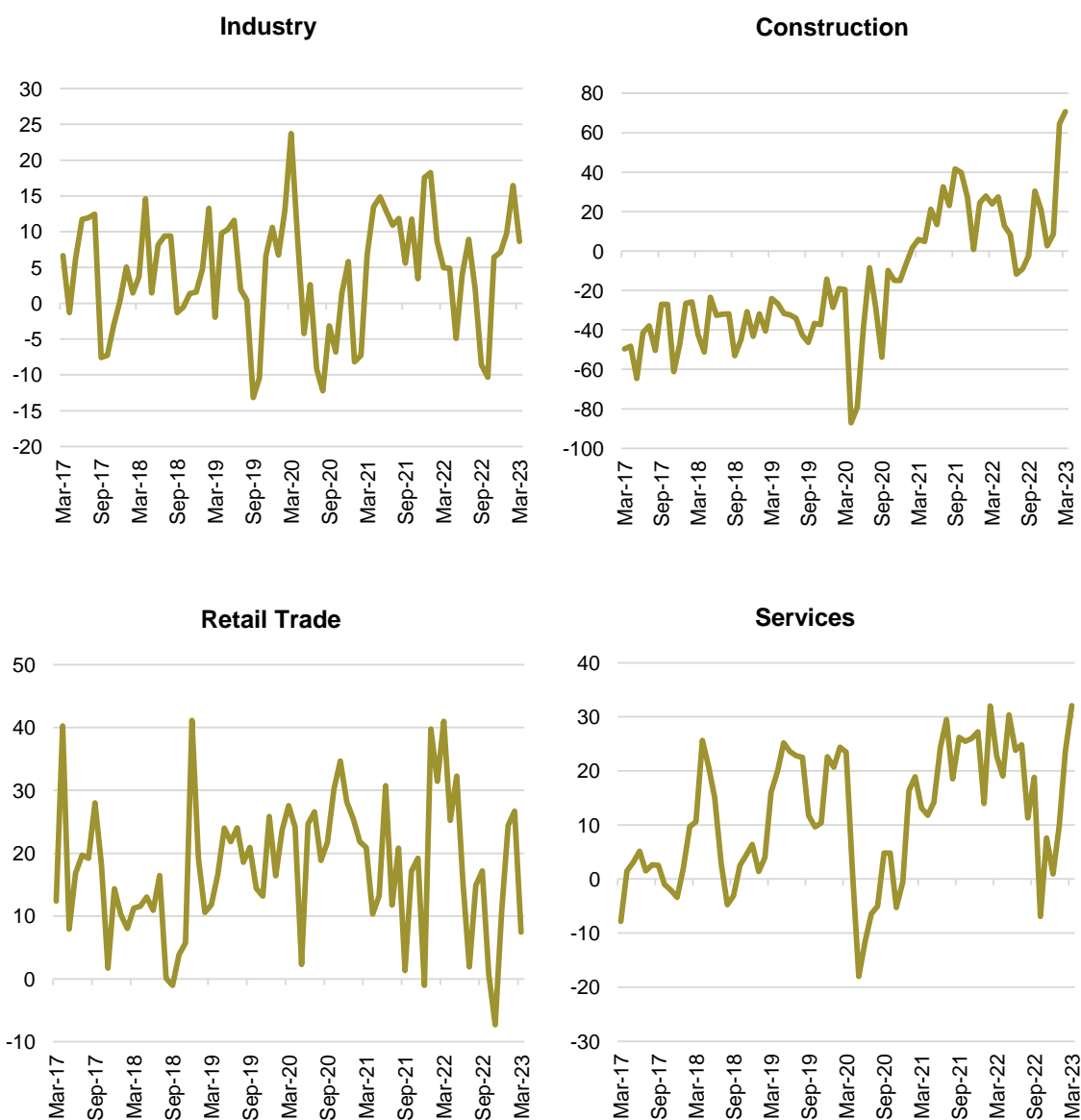
period of last year. Thus, the relative balance for the first quarter of 2023 increased by 21 points to +22 points in the quarter under review, while compared with the corresponding period of 2021 it declined by 1 point. Of the enterprises in the sector, 6% (down from 13% in the previous quarter) expect a decline in employment, with those anticipating an increase moving to 34% (from 14%). At the sectoral level, the trend is strongly positive in hotels-restaurants and land transport, while it is mildly negative in the financial intermediaries, miscellaneous business activities, and IT services.





Figure 3.18

Employment expectations (difference between positive and negative responses)



Source: IOBE

In the first quarter of 2023, compared with the previous quarter, there was a significant improvement in short-term employment expectations in construction and services, with the expectations in industry and retail trade strengthening mildly

#### Box of section 3.4

Trends in minimum wage earners in Greece in 2016-2022, by type of employment and company size

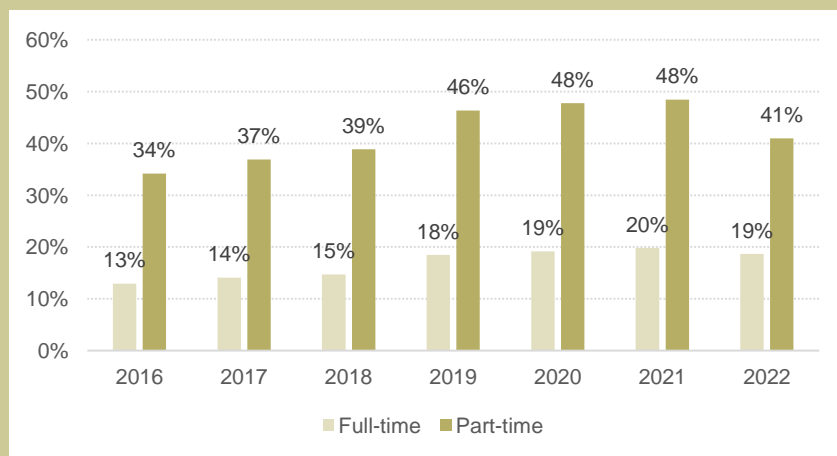
As of the beginning of April 2023, the minimum wage increased by 9.4% to EUR 780 (or EUR 910 on a 12-month basis). This box presents descriptive data on the distribution of employees paid with the minimum wage and the degree of wage compression in Greece in 2016-2022. For this purpose, we use data on the number and characteristics of employees, the type of employment, and the size of the enterprises, as recorded through the annual electronic entry of staff lists for all employees in the

country, working under private law, in the information system ERGANI (Ministry of Labour, Social Security, and Social Solidarity).

The period under consideration is of particular interest as it includes the two-year period of the 2020-2021 pandemic crisis. Also, during this period, policy measures were implemented with a direct impact on the labour market and the wage level, such as three hikes in the minimum wage (one in February 2019, one in January 2022, and one in May 2022) and three reductions in compulsory social security contributions (one in June 2020, one in January 2021, and one in June 2022).

The figures show that almost 1 in 5 full-time workers in Greece were paid the minimum wage in 2022, while the corresponding share is double for employees with flexible forms of employment (Figure B3.4). The rate for part-time or seasonal workers increased significantly in 2019, while in 2022 it fell to 41%, compared with 19% for full-time workers.

**Figure B3.4.1 Share of workers remunerated with the minimum wage in total employees, 2016-2022**

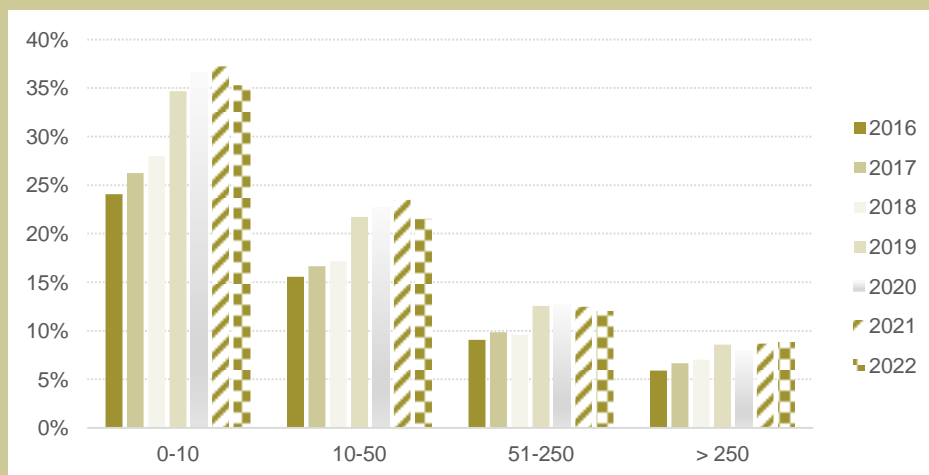


Source: ERGANI, Data Processing: IOBE

A large part of salaried employees (around 700.000 or 29.6% of the total) were employed in 2022 in enterprises of less than 10 people. Among them, 35% were paid the minimum wage in 2022, slightly lower following a systematic increase in the previous six years (Figure B3.5). This percentage is smaller the larger the size of the business. At the same time, the degree of wage compression, defined as the ratio of the minimum over the average wage, has been steadily increasing since 2019. In small enterprises, it was extremely high, at 77% (Figure B3.6) in 2022.

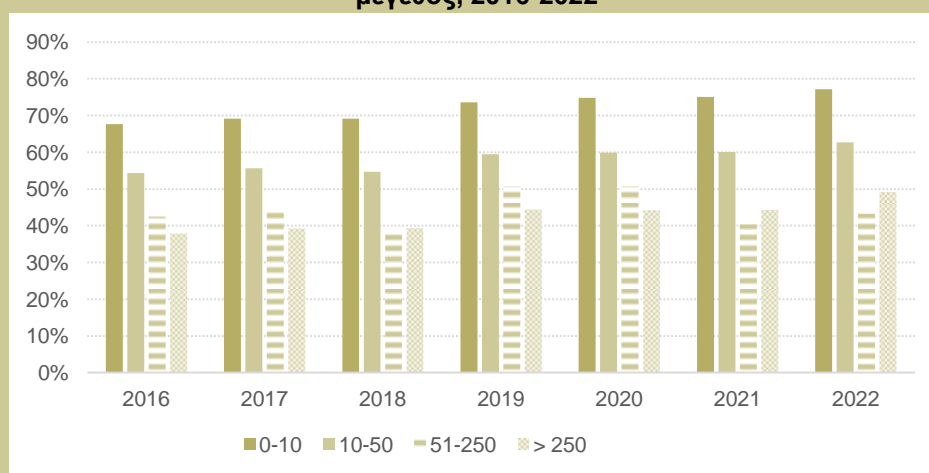


**Figure Π3.4.2 Share of workers remunerated with the minimum wage in total full-time employees, by firm size, 2016-2022**



Source: ERGANI, Data Processing: IOBE

**Figure Π3.4.3 Minimum to average wage ratio among full-time employees, by firm size, ανά μέγεθος, 2016-2022**



Source: ERGANI, Data Processing: IOBE

In conclusion, the descriptive analysis shows that changes in the minimum wage, such as the recent one of April 2023, are expected to have a direct impact on a larger share of flexible workers as well as workers in small and medium-sized companies. At the same time, the high degree of wage compression in the Greek economy is highlighted, implying that priority should be given to policies that boost productivity and average wages of workers, by providing incentives for participation in the formal labour market.



### 3.5 Consumer and Producer Prices

- An increase in the HICP in the first quarter of 2023, to 6.4%, compared with 6.6% one year earlier.
- Price boost mainly by the inflationary impact on prices of non-energy goods. Rate of change in HICP with fixed taxes and excluding energy at 8.2% in the first two months of 2023, against 2.7% a year ago.
- For 2023, the Consumer Price Index is projected to increase by about 4.3%. Key assumptions:
  - the price of Brent oil will decrease
  - annually by about 18% on average

#### Recent developments

In the first quarter of this year, prices rose from a year earlier, with the average rate of change in the Consumer Price Index (CPI) standing at 5.9%, from 7.4% a year ago. The Harmonised Index of Consumer Prices (HICP) recorded a strong 6.4% increase in the same period of 2023, from 6.6% last year. In March 2023, the rate of change in the CPI stood at 4.6%, down from 8.9% in the corresponding month of 2022. There is also an upward trend in the HICP, with its rate of change standing at 5.4% in March, down from 8.0% in the same month last year.

As regards the effects of the HICP components on its trend, the strong increase in the harmonised index in January - February 2023, by 6.9%, is due to the positive impact of domestic demand, as the percentage change in the index with fixed taxes and excluding energy goods was 8.2%. Indirect taxation essentially had no impact on prices in the first two months of this year, from 2.8 percentage points a year ago.

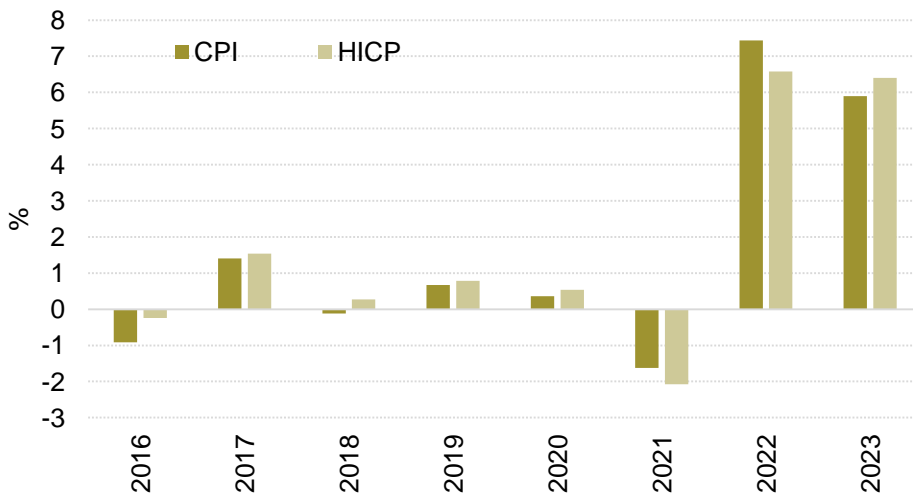
Regarding developments in energy commodity prices and their impact on the HICP, the average international oil prices in January-February this year declined from the same period last year. In particular, the average price of Brent oil in the first two months of this year stood at \$82.5/barrel, from \$91.7/barrel a year ago, a weakening of 10%.<sup>15</sup> The decline in the average exchange rate of the euro against the dollar over the same period, by 5.1%, to 1.07, compared with 1.13 a year earlier, limited the decline in the euro price of oil, with its average price standing at EUR 76.8/barrel, 5.1% lower than in the corresponding period of 2022. The de-escalation of the oil price, which is a key component of energy costs, explains the zero contribution of energy prices on the rate of change in the HICP domestically in January - February 2023, compared with a positive impact of 3.2% in the corresponding period of 2022.

<sup>15</sup> Average period prices based on Europe Brent Spot Price. Source: EIA, US Energy Information Administration [https://www.eia.gov/dnav/pet/pet\\_pri\\_spt\\_s1\\_d.htm](https://www.eia.gov/dnav/pet/pet_pri_spt_s1_d.htm)



**Figure 3.19**

Annual change in the domestic CPI and the HICP in Greece (%)

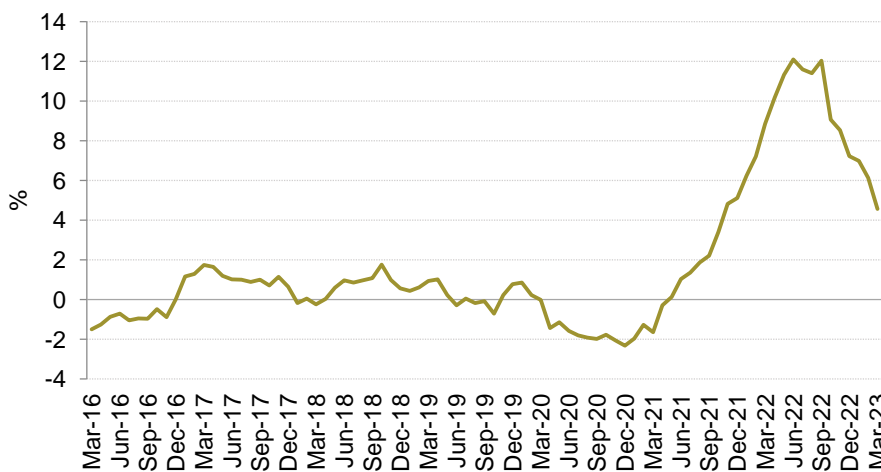


Increase of 5.9% in the domestic CPI in the first quarter of 2023 compared to one year before, down from 7.4% in the corresponding period of 2022.

Source: ELSTAT, data processing IOBE

**Figure 3.20**

CPI in Greece (annual percentage change per month)



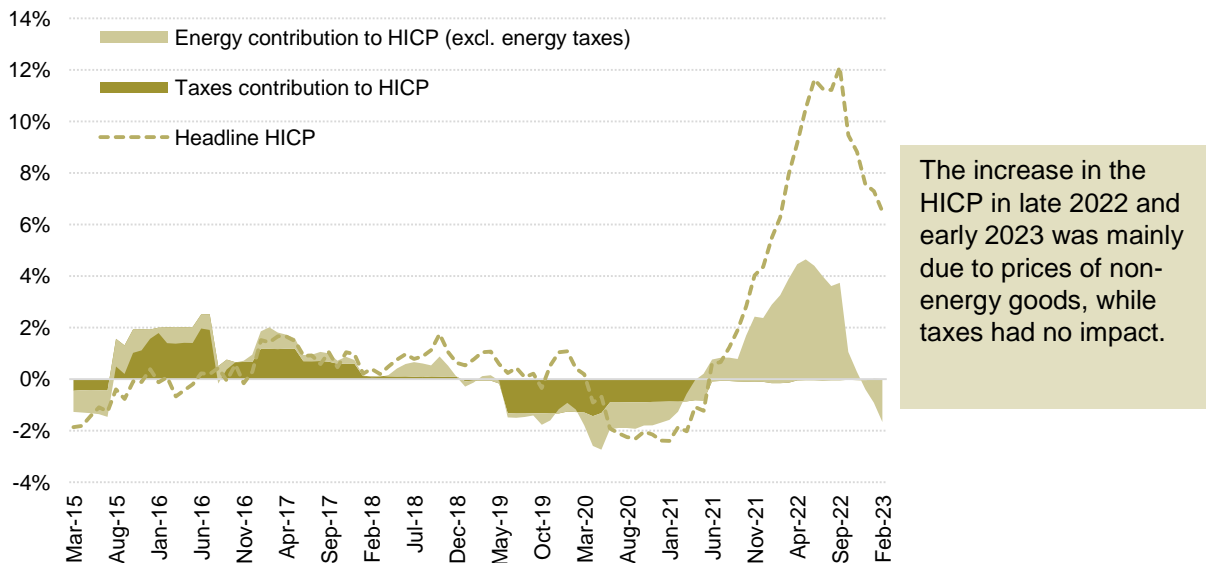
Easing of domestic CPI inflation in March (5.9%). The rate was lower than in the same month of 2022 (7.4%).

Source: ELSTAT, data processing IOBE

The rise in the HICP in Greece in January - February 2023, by 6.9%, brings the country close to the bottom of the ranking among euro area countries in terms of rate of change, below the weighted average. The average change in the euro area HICP in the first two months of this year stood at 8.6%, from 5.5% a year ago. Domestic demand and the indirect effects of the energy crisis on supply appear to have been the main drivers of price increases in the euro area, as the price index with fixed taxes and excluding energy goods increased by 7.6% over the period under review, compared with the first two months of 2022 (+2.7%).

**Figure 3.21**

Annual rate of HICP change in Greece and impact of energy product prices and tax changes



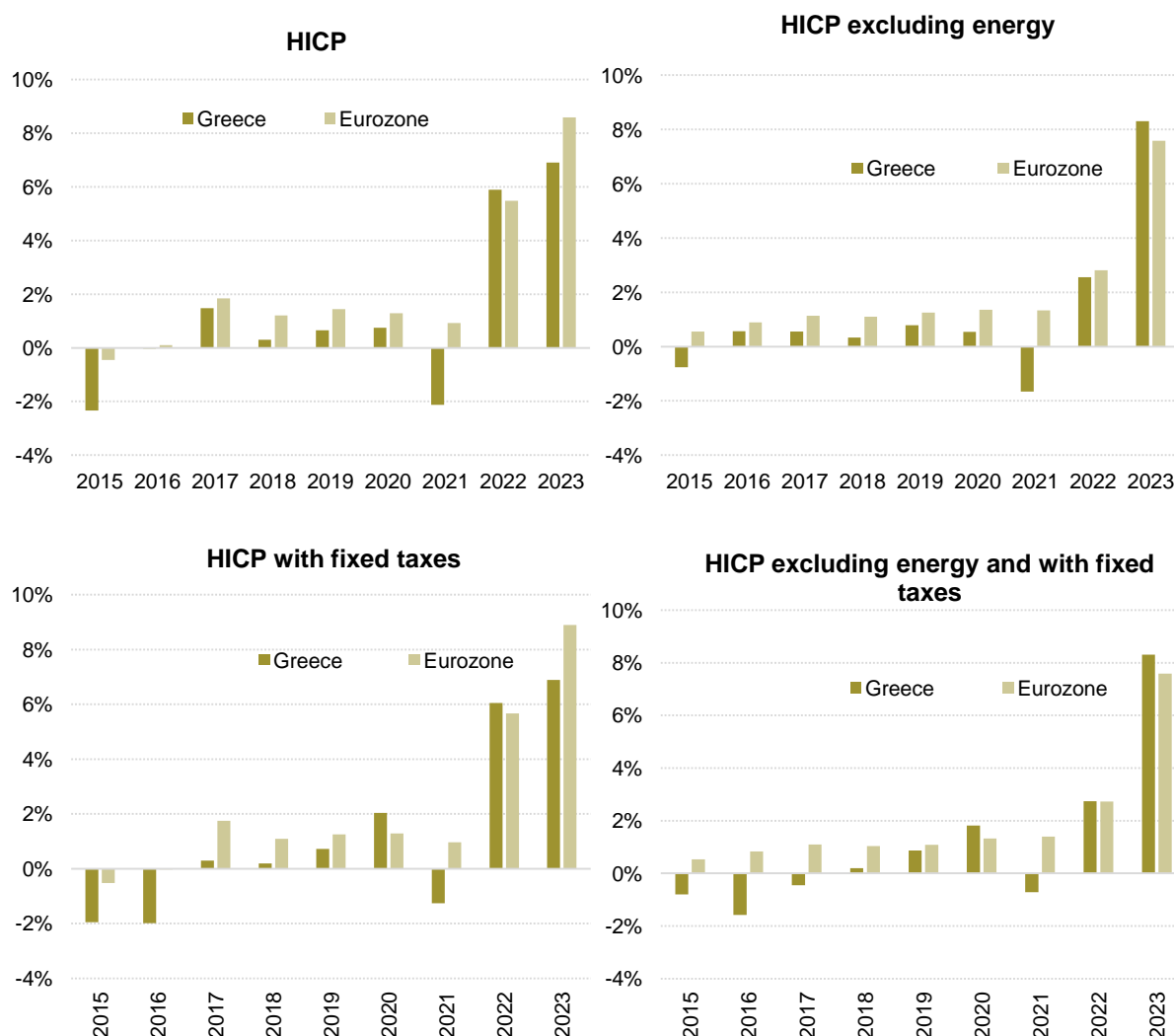
Source: Eurostat, data processing IOBE

As regards the trends in the individual product and service categories included in the domestic CPI, the largest increase in the first two months of 2023 was recorded in food and durable goods, possibly due to indirect effects of the energy crisis on supply. Prices in the food category rose to 15.1%, from a milder rise of 4.4% a year ago, while in durable goods prices increased by 10.6%, from a milder rise of 2.3% a year earlier. At lower levels was the change in hotels, where there was a 7.9% increase against no change one year earlier, followed by transport with 7.3%, from 1.9% in the corresponding period of 2022. Price increases also occurred in clothing and miscellaneous items, by 6.8% and 5.6%, respectively, from 4.7% and 0.7%, respectively, one year ago. The inflation in health prices went up to 4.1% from a milder increase of 1.9% in the first two months of 2022, while the rise in prices of recreation was even weaker (3.4%) from a marginal increase of 0.4% in the same period of 2022. In alcoholic beverages, prices increased in January - February 2023 compared to a year ago (2.9%), against a stronger rise of 4.3% in the first two months of 2022, followed by education with 2.2% after a marginal rise of 0.3% a year ago. By contrast, prices in communications fell by 1.5%, after a marginal rise of 0.4% a year ago. Prices fell also in Housing, 2.5% in the first two months of this year, against an increase of 4.5% in the corresponding period of 2022.



Figure 3.22

Annual HICP change in Greece and the Euro area (January- February)



Source: Eurostat, data processing IOBE

Domestic price rises in the first two months of 2023, with the inflationary impact of non-energy goods (8.2 percentage points) higher than the euro area average.

With regard to price trends on the production side in the first two months of this year, the Producer Price Index (PPI) for the domestic and external market as a whole recorded an increase compared to the same period of 2022 (+9%). In particular, the PPI without energy strengthened in January - February this year by 9.5%, compared with a milder rise one year ago (5.9%). In terms of trends in industrial product prices, paper products and base metals recorded the highest increase, by 16.2% and 15.2%, compared with an increase of 5.6% and 16.6% respectively one year ago. At lower levels was the rise for producer prices in food, by 13.6%, and for wood products, by 13.3%, after an increase of 4.3% and 17.8%, respectively, in the first two months of 2022. Increase in producer prices was recorded in January - February this year in electricity and natural gas, by 12.2% compared to 64.4% a year ago, followed by non-metallic minerals, rising 9.1% after a milder rise of 3.7% a year ago. By contrast, the trend in producer prices in coal-lignite production and computers was negative, by 61.1% and 2.3% respectively, after an increase of 35.4% and 2.3% respectively one year ago.



As regards the evolution of the Import Price Index (IPI) in January this year, an annual increase of 0.4% was recorded, compared with a clearly stronger increase of 31.8% a year ago. Stronger than in Greece was the growth of the same index in the euro area, by +7.1%, compared with an increase of 26.1% in the corresponding month of 2022. The marginal rise in import prices domestically ranks Greece last, after France (1.0%), in terms of import price increase among ten euro area countries for which data were available in this period. The highest increase in import prices was recorded in the Netherlands (11.9 %) and Spain (11.3 %). It should be noted that in all euro area countries for which data are available, import prices rose in the first month of 2023 compared with a year ago, which mostly reflects the indirect effects of rising energy prices.

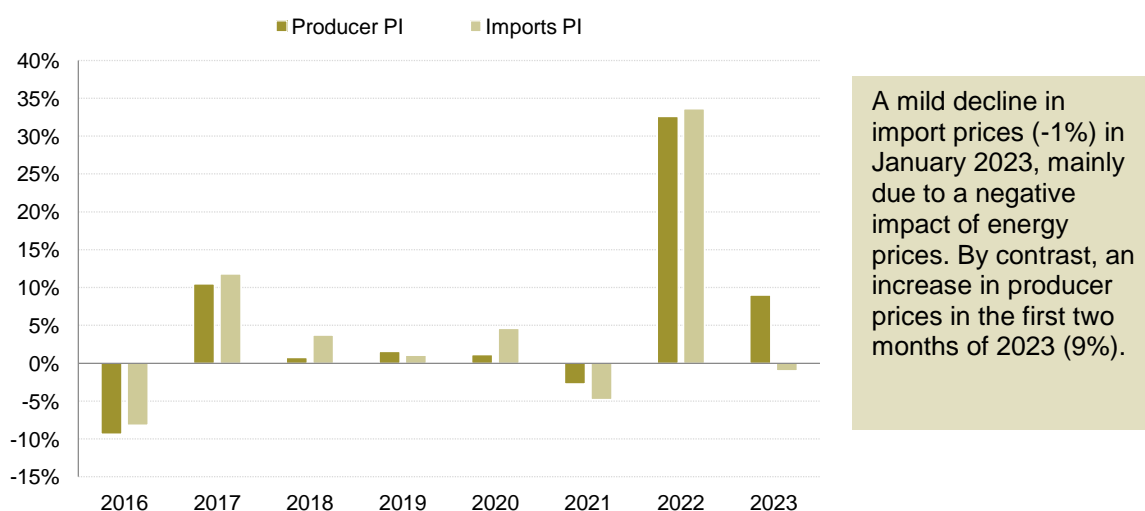
Among the individual categories of imported products, the largest increase in January this year was recorded in electricity supply prices, by 159.1%, owing to the positive impact of energy prices, after a marginal decline of 0.2% in the corresponding month of 2022. Almost of the same intensity was the boost in coal and lignite, 133.1%, against no change a year ago. In mineral ores and food, import prices increased by 15.4% and 14.8% respectively in the first month of this year, from an increase of 13.9% and 5% respectively one year ago, followed by paper products, with 14.2% from a milder boost of 8.0% in January 2022. Lower levels are found in tobacco products and furniture, with the rise in prices in these categories reaching 12.3% and 8.2% respectively in the period under review, against a milder rise, by 2.6% and 1.7% respectively one year before.





Figure 3.23

Annual change of PPI and IPI in Greece (January - February)



Source: ELSTAT, data processing IOBE \* The data for the Imports Price Index refer to January.

### Medium-term outlook

An analysis of trends in the main components of the domestic Consumer Price Index over the January-February period of this year showed that its strong growth was mainly driven by the positive impact of the prices of non-energy goods. The sharp rise in energy commodity prices, as a result of Russia's war in Ukraine, appears to have significantly eased, with indirect but inflationary supply effects still in play. Higher demand since the lifting of the coronavirus containment measures, as well as the indirect effects of the rising (up to the end of last year) energy prices have maintained the upward trend in prices in key product categories. That said, the mild winter, the timely procurement of the necessary quantities of gas for Europe after the interruption of Russian supply, and the preservation of high reserves in gas storage at the end of winter have had a restraining effect on the upward trend in international energy prices.

In February, the EU Member States imposed a new, tenth package of sanctions on Russia, including bans on exports of critical technologies and industrial products, provision of gas storage capacity to Russians, and bans on the transit of dual-use goods and technologies exported from the EU through Russia.

Against this background, in the first quarter of 2023, the international price of Brent oil stood at \$81.1 per barrel, down 19.6% from a year ago. The euro/dollar exchange rate in the period under review averaged 1.07, 4.3% lower than a year ago. Subsequently, the average euro oil price in the first quarter of this year reached EUR 75.5/barrel, weakening from a year ago, by 16%.

#### *Demand effects*

In terms of expected trends in consumer demand, the new increase in the minimum wage since 1 April 2023, the increase in unemployment benefits, the income support measures of "vulnerable" social groups (low pension beneficiaries, people with disabilities, beneficiaries of guaranteed minimum income, etc.) are expected to boost disposable income and to have a positive effect on prices. Emergency measures to address the high cost of living, such as the market pass, the household basket, and the godfather's basket are also expected to have an impact on disposable income and thus on domestic demand.

In addition, the extension of support measures for households and businesses to mitigate energy costs domestically, announced in December last year, is expected to indirectly boost disposable income, thereby contributing to stronger domestic demand. As a result, consumer demand is expected to strengthen in 2023, by about 1.2-1.5%, maintaining to some extent prices at a high level.



### *Tax effects*

Regarding the expected effects of indirect taxation interventions, the reintroduction of reduced VAT rates on all Aegean islands without preconditions is expected to have a mild effect on price rises this year. Finally, reduced VAT rates on some goods and services remain until June 2023, while property support measures are in place until December 2024, developments that are not expected to have any impact on prices, as more than a year has passed since their introduction.

### *Energy effects*

Turning to recent developments in energy goods, the international price of Brent oil stood on average in March this year at \$78.4 per barrel, down 33.1% from a year ago. The euro/dollar exchange rate in the same month this year stood at 1.07, 2.8% lower than in the same month of 2022. Subsequently, the average euro oil price stood at EUR 73.3 per barrel, down 31% from a year earlier.

Regarding oil supply, at its last meeting in early April, OPEC+, including Russia, decided to cut its daily output as of the following month. Led by Saudi Arabia, OPEC+ has decided to cut daily output from the following month of this year by at least 1 million barrels in order to maintain balance in international markets. Concerns and uncertainty over the global economic outlook, especially after the recent collapse of two regional banks in the United States, led to this decision, with Saudi Arabia moving to a cut of 500,000 barrels a day. Last October it was decided to cut daily oil production by up to 2 million barrels in response to falling oil prices and uncertainty about a global recession, a decision that was reaffirmed at the December meeting.

Although global consumption in 2023 is expected to grow by 2.3 million barrels per day, reaching a record high of 101.9 million barrels per day, OPEC forecasts a surplus in daily oil production. OPEC estimates the surplus in daily output in the second quarter of this year at 300,000 barrels, which could be even higher throughout the year if Russia's output remains strong in spite of international sanctions. Russia, fearing new sanctions, is accelerating its exports, even expanding its products (e.g. refined commodities). Supply growth is also expected from the US, Canada, Colombia, and Nigeria.

In February, the Council of the EU decided to set two price caps (\$45/barrel and \$100/barrel) for petroleum products originating or exported from Russia.<sup>16</sup> Finally, as regards the gas price, in December 2022 the European Commission imposed a cap on gas import prices of all sources in response to the energy crisis. The mechanism provides for a price cap of EUR 180 per MWh in the Dutch TTF from February this year, but it is automatically eliminated if demand increases by 10-15%.

Domestically, the measures to address high energy costs announced in December have a moderating effect on changes in energy prices, as the energy prices taken into account in the CPI include subsidies. In addition, the easing of wholesale prices is expected to have a restraining effect on electricity tariffs in April, albeit without bringing substantial changes to consumers and thus their disposable income, as the final prices they pay are formed through subsidies.

### *World demand*

The outlook for a recovery in global demand in 2023 appears to be improving according to the macroeconomic forecasts of international organisations. In particular, global GDP growth is expected to be around 2.6% in 2023, higher than projected in November (2.2%).<sup>17</sup> The positive trend in energy prices appears to be easing, with inflation slowing significantly, boosting disposable income and creating further growth prospects. The recovery momentum is expected to be stronger in China in 2023, vis-à-vis the euro area and the US as its economy restarts fully, with demand for oil expected to increase significantly, mainly in the second half of this year.<sup>18</sup>

<sup>16</sup> <https://www.consilium.europa.eu/el/policies/sanctions/restrictive-measures-against-russia-over-ukraine/history-restrictive-measures-against-russia-over-ukraine/>

<sup>17</sup> OECD Economic Outlook, March 2023: A Fragile Recovery

<sup>18</sup> International Energy Agency, World Energy Outlook 2022



Against this background of developments, the average oil price in 2023 is expected to stand at \$82.9/barrel from \$100.9/barrel in 2022 (-17.9%), mainly due to a slowdown in global growth.<sup>19</sup> The euro/dollar rate this year is expected to average 1.08, 2.8% higher than in 2022.<sup>20</sup> Subsequently, the average euro oil price is expected to reach EUR 76.7/barrel in 2023, a decline of 20% compared to this year.

Taking into account the above trends and developments in the main factors affecting consumer prices, it is projected that the Consumer Price Index will strengthen slightly this year, at a pace in the region of 4.3%, mainly driven by consumer demand.

Important information on price developments in the coming period is also provided by the results of IOBE's monthly business and consumer surveys, which provide leading indications of the price evolution on the supply side.

The trends in price expectations were mixed in the first quarter of 2023 compared with the fourth quarter of last year. With the exception of services where they mildly strengthened, in retail trade and private construction, the price expectations move slightly downwards, while in industry their weakening is more pronounced. Year on year, the expectations for price developments recorded a mild positive change in private construction and services, and a slight decline in retail trade, while in industry the price expectations fell markedly. In more detail:

In industry, the expectations of price developments weakened quarter on quarter in the first quarter of the year. In particular, the index stood at +17 points from +27 points in the previous quarter, while it declined by 35 points compared with the same quarter of 2022. Of the firms in the sector, 9% were expecting prices to fall in the short term, with the share of those anticipating their rise falling to 26% (from 37%), as the remaining 65% were expecting price stability.

In retail trade, the balance of +62 points for price expectations in the sector in the previous quarter declined by 5 points, while at the same time, it was 2 points lower than in the corresponding period of 2022. Of the companies in the sector, only 1% were expecting prices to fall in the short term, with the share of those anticipating their rise falling to 58%, as the remaining 41% (from 37%) were expecting price stability. In the sub-sectors of retail trade, changes in price forecasts in the first quarter of 2023 compared with the immediately preceding quarter were negative in all sectors under review, with the exception of the balance in department stores which increased significantly.

The average expectations index for price change in services strengthened significantly in the quarter under review from the previous quarter to +32 (from +20) points, while at the same time, it moved slightly higher than the corresponding average performance of the first quarter of 2022 (+27 points). In the current quarter, 2% (from 9%) of the companies in the sector were expecting prices to decline and 34% to increase. The indicator strengthened in most examined subsectors, with the exception of land transport where it declined significantly.

Finally, in the private construction sector, the strong positive balance of +50 points in the previous quarter weakened slightly, to +46 points, having changed slightly upwards compared to the corresponding level in 2022 (+39 points). Moreover, only 6% of the firms in the sector were not expecting a decline in the sector's prices, while the share of those expecting an increase was 52% (from 50%), with the remaining 42% (from 50%) anticipating price stability.

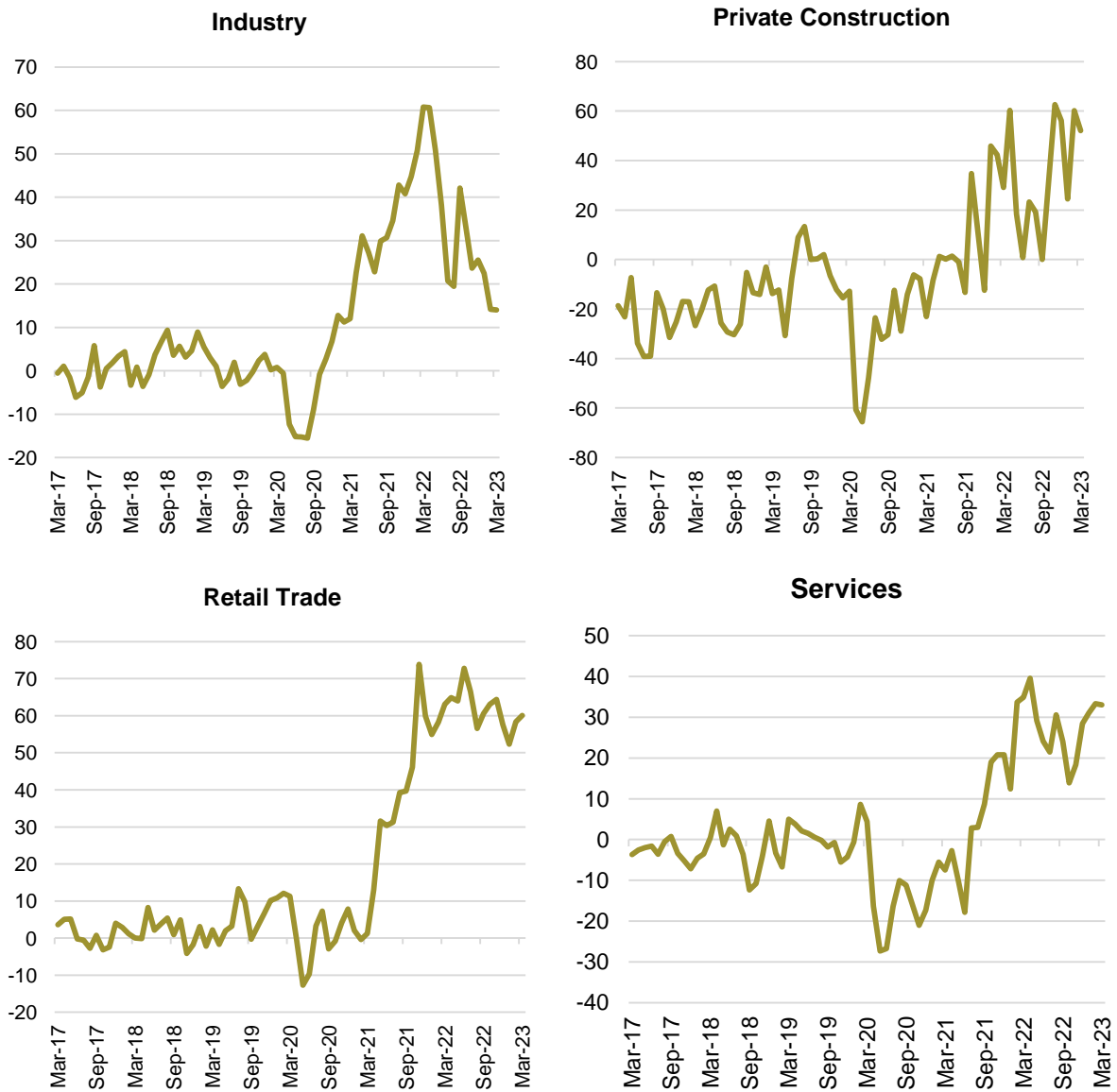
<sup>19</sup> Energy International Agency, Short-Term Energy Outlook, March 2023

<sup>20</sup> Macroeconomic projections, ECB, March 2023



Figure 3.24

Price expectations over the coming quarter (difference between positive and negative answers)



Source: IOBE

Trends in price change expectations are mixed in the first quarter of 2023 compared with the fourth quarter of the previous year, with private construction and retail trade declining mildly, services strengthening markedly, and the relative balance in industry weakening significantly.



## 4 DEVELOPMENT PROSPECTS AND FINANCING NEEDS OF THE CONSTRUCTION SECTOR

- This chapter outlines key figures of the construction sector and the planning for infrastructure and other construction projects to be financed by national and EU resources in the coming years.
- It assesses indicatively the relevant investment costs for the period 2021-2026 on the basis of available data on financing of projects.
- It presents the evolution of financing in the construction sector and compare it with other sectors of economic activity.
- We carry out econometric estimates of the relationship between the net financing flows of the construction sector and the level of construction activity and estimate the sector's needs for debt capital up to 2026.

### Introduction

The prospect of a significant increase in investment in infrastructure and other construction projects in Greece is set to strengthen the financing needs of the construction sector in the coming years. A study carried out by IOBE investigated the potential needs of construction companies for both short-term bank loans, mainly used as working capital, and long-term bank loans, financing business modernisation investments, project development, and other purposes.<sup>21</sup>

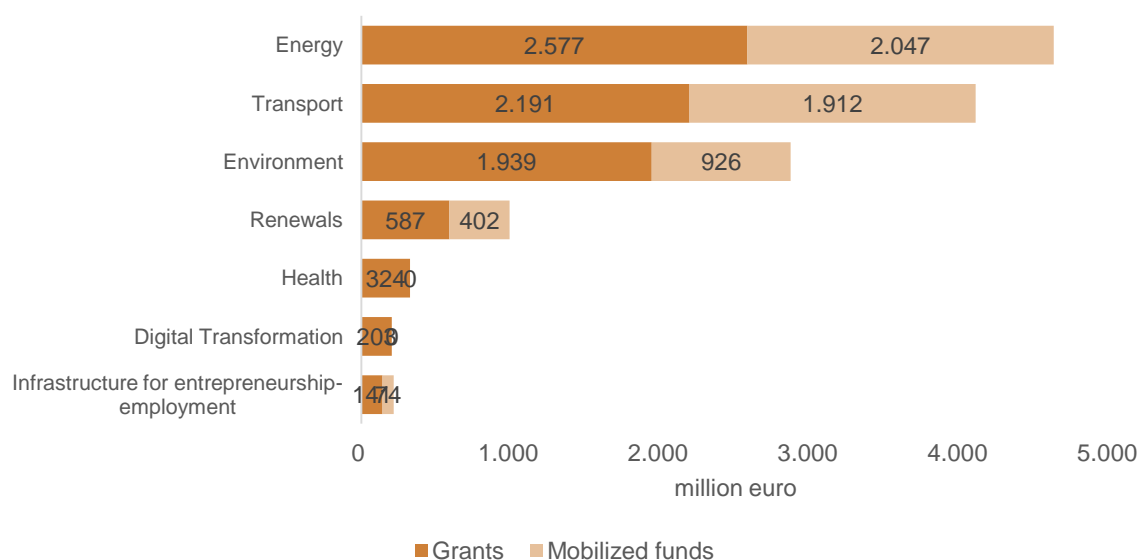
### Prospects for the development of the construction sector in Greece

Thousands of small and medium-sized enterprises (SMEs) and professionals are active in the construction sector. The production value of the construction sector declined dramatically after 2007, causing a decline in the sector's profitability and investment. However, after a decade of contraction and divestment, the outlook for construction appears to be particularly positive. The recovery fund, together with the remaining European and national funds, will finance infrastructure projects that will fuel the strong growth of construction in the coming years. Based on an analysis of the actions of the National Recovery and Resilience Plan (NRRP), it is estimated that grants of EUR 7.96 billion will be directed to projects directly related to construction, mobilising total resources of EUR 13.3 billion (Figure 4.1).

<sup>21</sup> The study is available (in Greek) here: [http://iobe.gr/research\\_dtl.asp?RID=264](http://iobe.gr/research_dtl.asp?RID=264)

**Figure 4.1**

Total investment resources mobilised by grants to RRF projects directly related to construction activity, by sector (estimate)



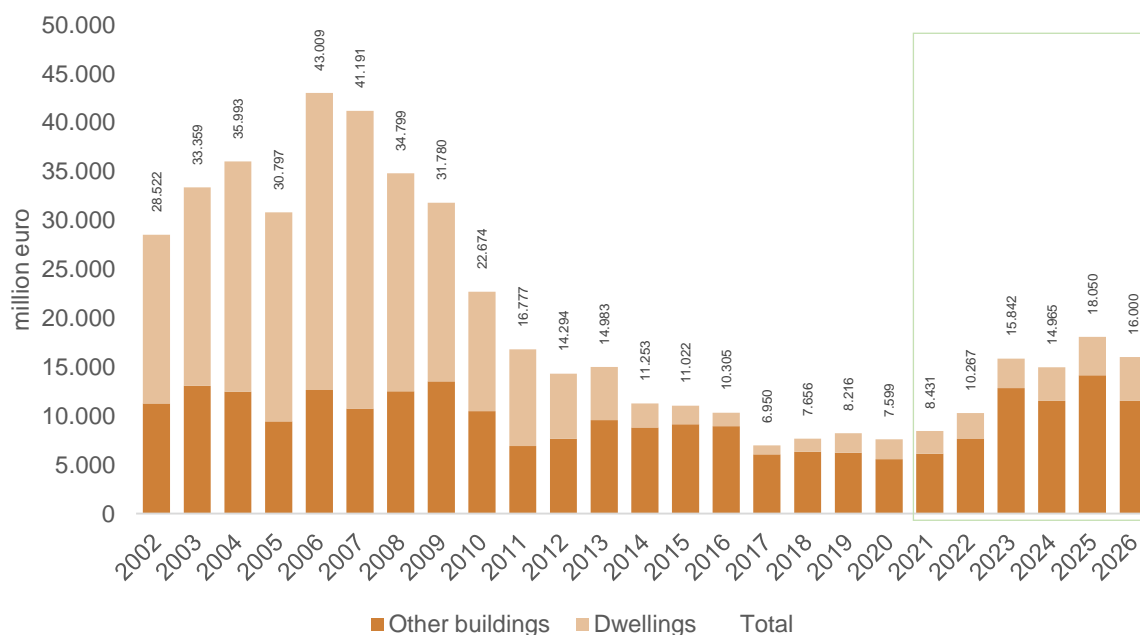
Source: Greece 2.0 National Recovery and Resilience Plan. IOBE estimates.

The construction projects supported by grants from the recovery fund mainly concern the sectors of energy (EUR 4.6 billion), transport (EUR 4.1 billion), and the environment (EUR 2.9 billion). Together with the resources from the RRF loans (and funding capital leveraged with the loans), it is estimated that a total of EUR 27.0 billion (EUR 13.3 billion in grants and EUR 13.7 billion in loans) could be mobilised for projects directly related to construction in 2022-2026.

Therefore, investment in construction – mainly of infrastructure – is expected to significantly boost the sector's share in GDP in 2022-2026. In the medium term, additional investment in infrastructure and housing is estimated annually at up to 4.1% of GDP (compared to 2020) – with the share of investment in construction projects reaching up to 8.1% of GDP in 2025 from 4% in 2020. It is also estimated that the production value of the construction of infrastructure and housing will follow a strong upward trend in 2022-2026, exceeding EUR 18 billion in 2025 (from EUR 7.6 billion in 2020 - Figure 4.2). Due to the strong impact of NRRP investments, the overall impetus will be given to a greater extent by investments in non-residential infrastructure and construction projects rather than housing. Nevertheless, private building activity will also strengthen from the (low) level recorded in 2020.

Figure 4.2

Projection of the value of construction output, 2021-2026



Source: Eurostat, IOBE estimates 2021-2026.

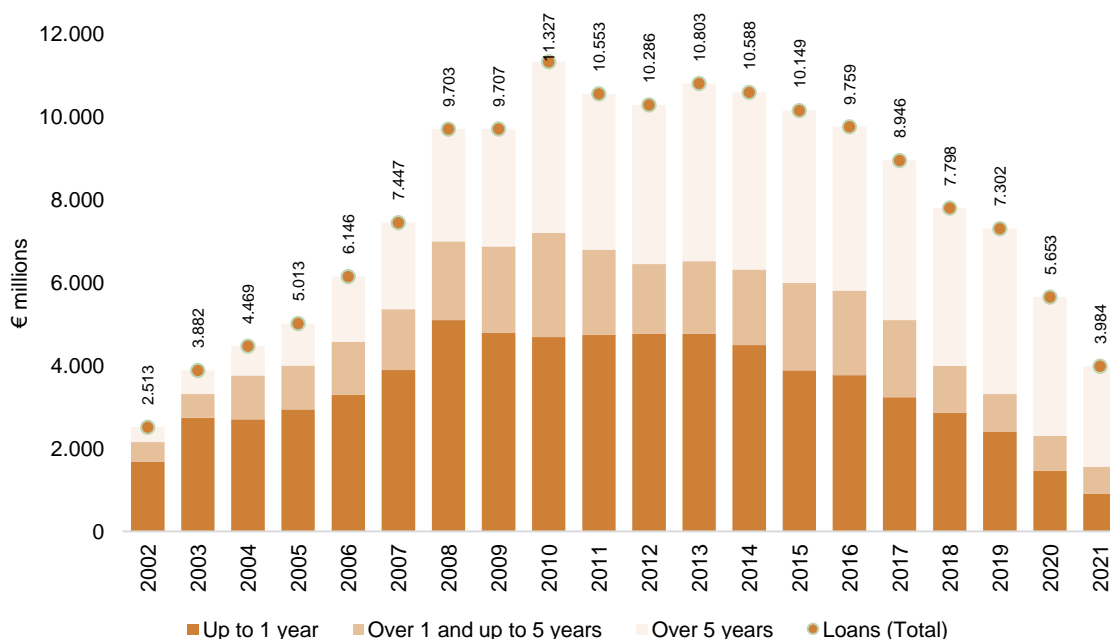
### Evolution of financing in the construction sector

The financing received by companies in the construction sector is mainly directed at: a) working capital, to cover operational needs and to finance transactions (short-term borrowing), b) purchase of fixed equipment (mainly long-term borrowing for machinery and other equipment, purchases of real estate for professional use, development of projects, etc.) and c) issuing letters of guarantee for needs such as participation in tenders, good execution of a project, acceptance of bookings, advance payment, and payment of obligations.

As regards the financing of the Construction sector by domestic monetary financial institutions (MFIs) in 2002-2021, three phases can be distinguished (Figure 4.3). The first covers the period 2002-2010, when the balance of domestic MFI loans to the construction sector more than quadrupled, from EUR 2.51 billion in 2002 to EUR 11.33 billion in 2010, as a result of rising construction activity and rapid credit growth in the economy. The second phase covers the period 2011-2015, when the domestic financial crisis intensified and the balances of loans to the sector remained at an average of EUR 10.5 billion, but in part with a large accumulation of non-performing loans. The third phase, which started in 2016 and reached up to 2021, is characterised by a significant decrease in outstanding funding (EUR 3.98 billion in 2021 or -59.2 % compared to 2016), which suggests that loan repayments exceeded new loan disbursements to Construction. However, most of this decrease is due to write-offs of (non-performing) loans from credit institutions' balance sheets. Balances of financing in Construction were 63.5% smaller in December 2021 compared to December 2010, when the corresponding decrease in total business loans was 50.1%.

**Figure 4.3**

Analysis of construction sector financing by domestic MFIs, 2002-2021 (end-period balances)



Source: Bank of Greece.

The outstanding loans of domestic MFIs to activities of architects and engineers are estimated at EUR 627 million in 2020, mainly related to loans with a maturity of more than 1 year (EUR 500 million or 80%).

In December 2021, 23% of the outstanding loans were of short-term duration (less than 1 year). This category mainly includes loans used as working capital, with no fixed maturity. Loans with a maturity of more than 5 years had the largest share in the total balance, with 61%, while 16% of the total balance was for loans with a maturity of 1 to 5 years. Overall, construction accounted for 7.1% of all outstanding financing to non-financial corporations in 2021. It is one of the sectors with relatively high financing needs in the Greek economy, after manufacturing, trade, tourism, and energy.

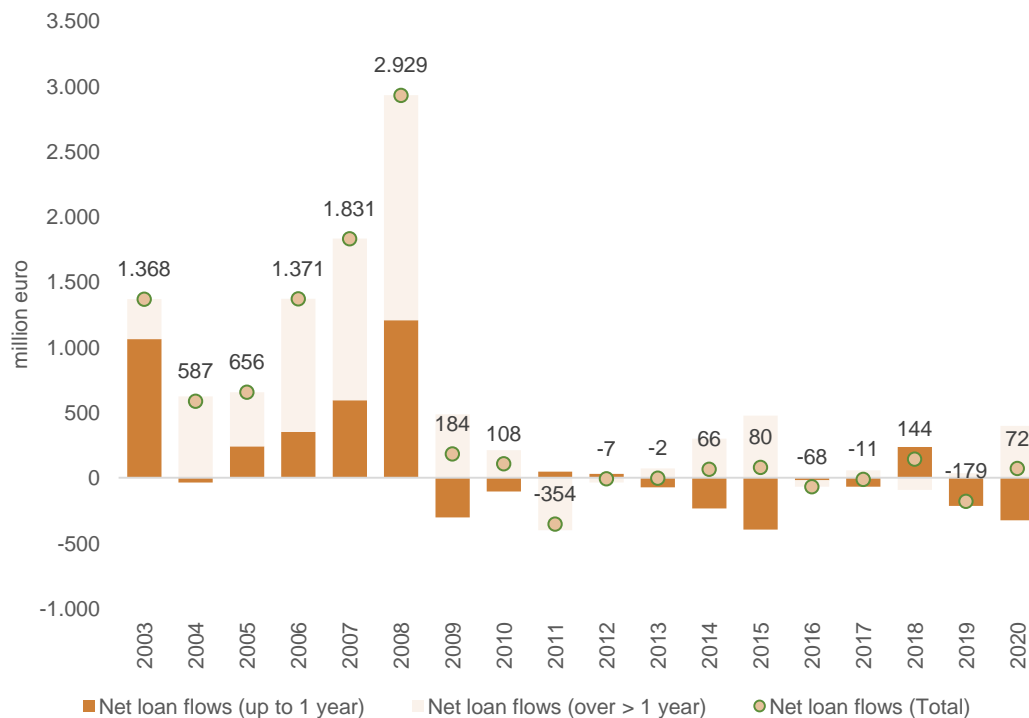
Net loan flows are derived from changes in outstanding loans adjusted for exchange rate differences, write-offs, and reclassifications of loans. For the construction industry, credit growth was strong until 2008 (Figure 4.4). Net flows of loans to construction and activities of architects and engineers declined significantly after 2008, stagnating by 2020.





Figure 4.4

Net flows of loans to construction, 2003-2020



Source: IOBE estimates based on data from the Bank of Greece. Note: Net flows are derived from changes in outstanding loans adjusted for exchange rate differences, write-offs, and reclassifications. Negative values suggest that loan repayments exceeded the disbursements of new loans.

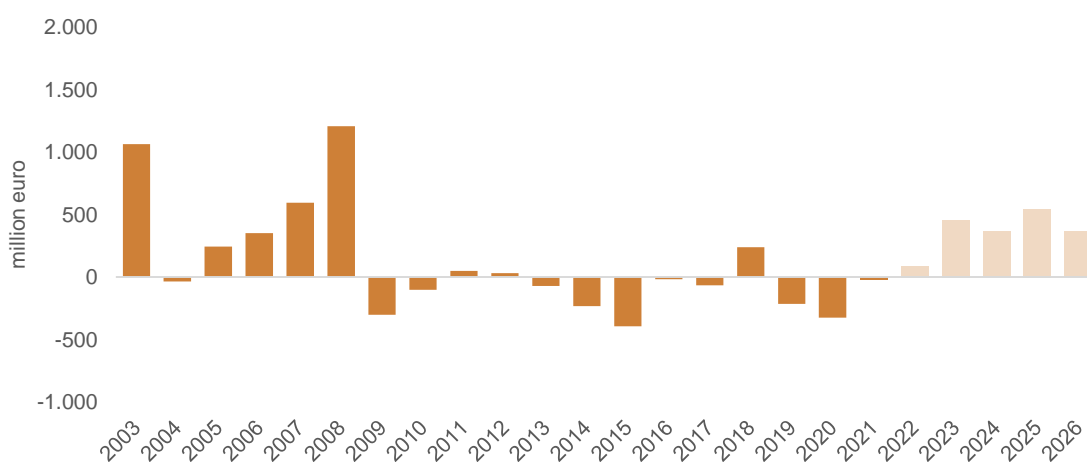
The stagnation of net bank financing flows during the financial crisis in the construction sector, but also in the Greek economy as a whole, highlights the underfinancing of SMEs, concerning not only their working capital but also their investment needs. As a result, the economic crisis and the impossibility of accessing debt capital created a financing gap, the size of which arises from the divergence between the supply and demand of capital by SMEs. Based on data from the SAFE survey of the European Central Bank, the financing gap of SMEs in Greece (hence also of companies active in the construction sector) is larger than the EU average. It increased in the early years of the economic crisis and gradually eased until 2019. However, since 2020, with the pandemic crisis and other shocks to the economy (e.g. high energy costs), the financing gap of SMEs in Greece has widened again. The difficulties of financing enterprises in the construction sector are also highlighted in the business surveys of IOBE, where together with insufficient demand they are the main factors affecting construction activity in Greece in the current period, albeit improving compared to the economic crisis period. Moreover, the higher borrowing costs of Greek enterprises compared to the euro area average degrade the competitiveness of the companies in the sector, which are required to cover their operating and investment costs with a significant disadvantage.

## Assessment of the financing needs of the construction sector

The development of public and private construction projects, participation in public works, and the modernisation of the production capacity of the sector will require significantly higher funding from the financial system, in terms of both working capital and medium and long-term debt. Based on the results of econometric estimates and the expected development of construction activity, it is estimated that net loan flows with a maturity of up to 1 year (working capital) to construction could fluctuate in 2022-2026 from EUR 363-EUR 546 million. Similarly, net loan flows with a maturity of more than 1 year could fluctuate over the same period between EUR 1.04 billion and EUR 1.44 billion (Figure 4.5 and Figure 4.6).

**Figure 4.5**

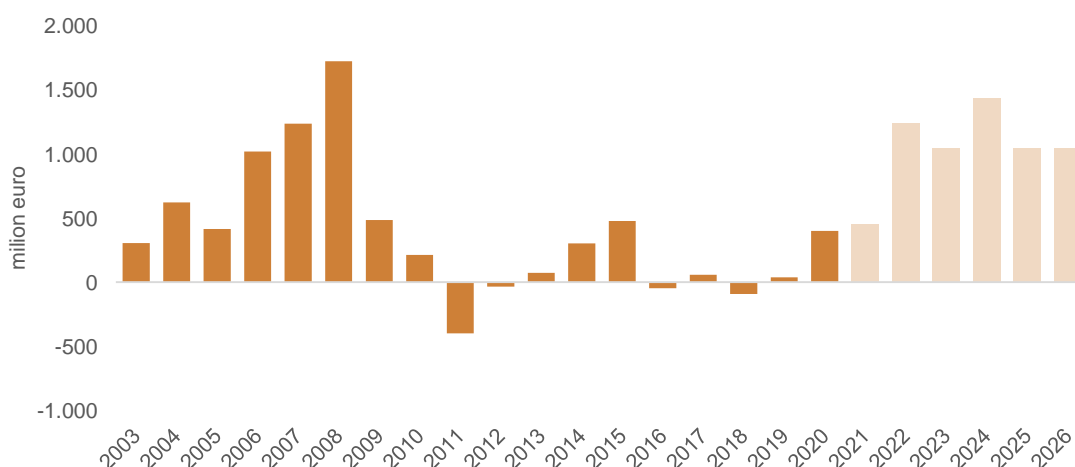
Net flows of loans with a maturity of up to 1 year in construction, 2003-2026



Source: IOBE.

**Figure 4.6**

Net flows of loans with a maturity > 1 year in Construction, 2003-2026



Source: IOBE.

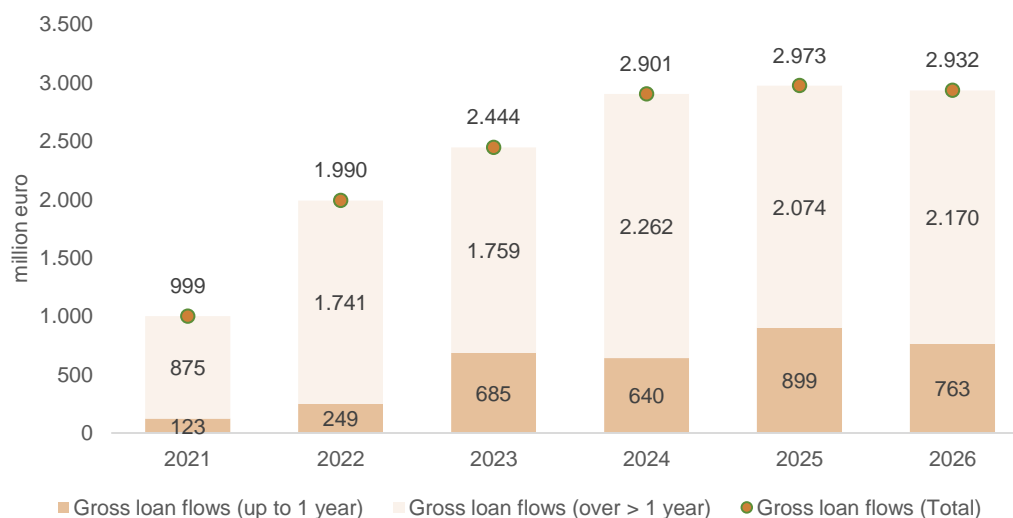
Net loan flows with a maturity of up to 1 year for activities of architects and engineers could range from EUR 46 million to EUR 124, while for loans with a maturity of more than 1 year they can range between EUR 99 million and EUR 212 million.



Overall, it is estimated that annual gross loan flows in the construction sector could range from EUR 2.0 billion to EUR 3.0 billion in 2022-2026 (Figure 4.7). The gross flows of short-term loans are estimated to range from EUR 250 million to EUR 900 million. The majority of loans will be long-term loans with a maturity of more than one year, with their gross flows ranging from EUR 1.7 to EUR 2.2 billion.

**Figure 4.7**

Estimation of gross flows of loans to construction and activities of architects and engineers, 2021-2026



Source: IOBE. \*Gross flows are derived from net flows adjusted for an estimate of loan repayments.

### Analysis of financing needs of enterprises in the construction sector

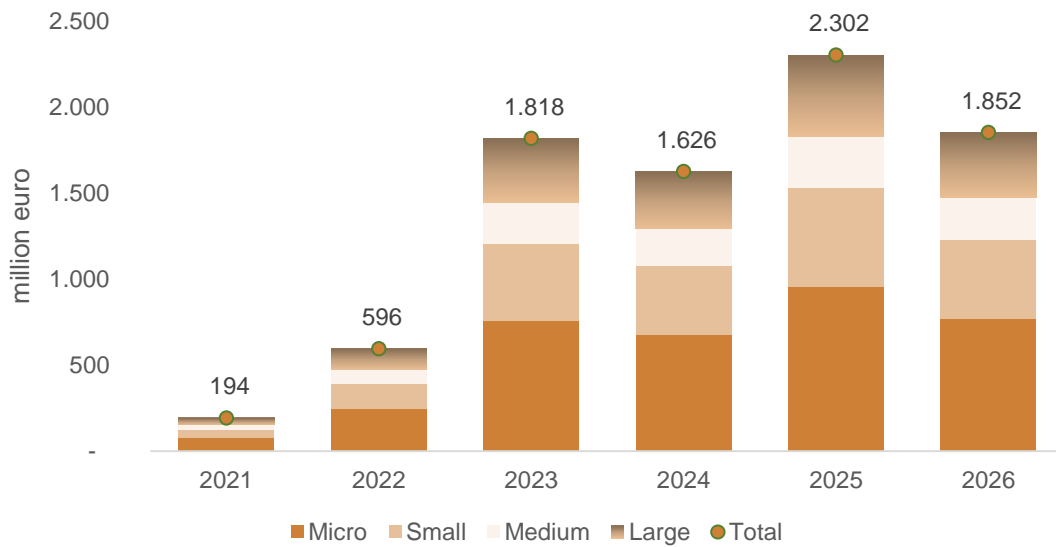
The study further explores the financing needs of the construction sector, taking into account possible different characteristics of enterprises, using data from financial statements of construction and engineering enterprises, covering the 2000-2020 period. The ultimate objective is to statistically assess the relationship between the amount of short- and long-term borrowing of companies with variables, such as profitability and turnover, in order to further determine the needs of construction and engineering companies for debt capital based on their size. Note that this analysis is carried out using a different methodology and using data on balances of bank loans (rather than net loan flows), which include non-performing loans. Therefore, the two approaches to identify the financing needs used in the study are not directly comparable to each other, but provide an estimate of the potential range of financing needs of the construction sector in the coming years.

The growth of construction activity will significantly boost the size of the sector's businesses in the coming years. It was estimated that the overall turnover of the sector will double in 2021-2026, reaching EUR 19.8 billion in 2026, if all the resources of the recovery fund (grants and loans) considered in the study to be directed to construction projects are absorbed.

The expected increase in the turnover of construction and engineering firms will also reinforce the need to increase their bank lending. The total net bank lending of companies in the sector in 2022-2026 is estimated to increase compared to the 2020 level by EUR 596 million to EUR 2.3 billion (Figure 4.8). For micro-enterprises, the increase in total bank lending is estimated to range from EUR 248 million to EUR 957 million, representing 42% of the total increase. Small businesses account for 25%, medium-sized enterprises for 13%, and large firms for 21% of the total increase in net bank lending.

**Figure 4.8**

Estimate of change in total bank loans by business category



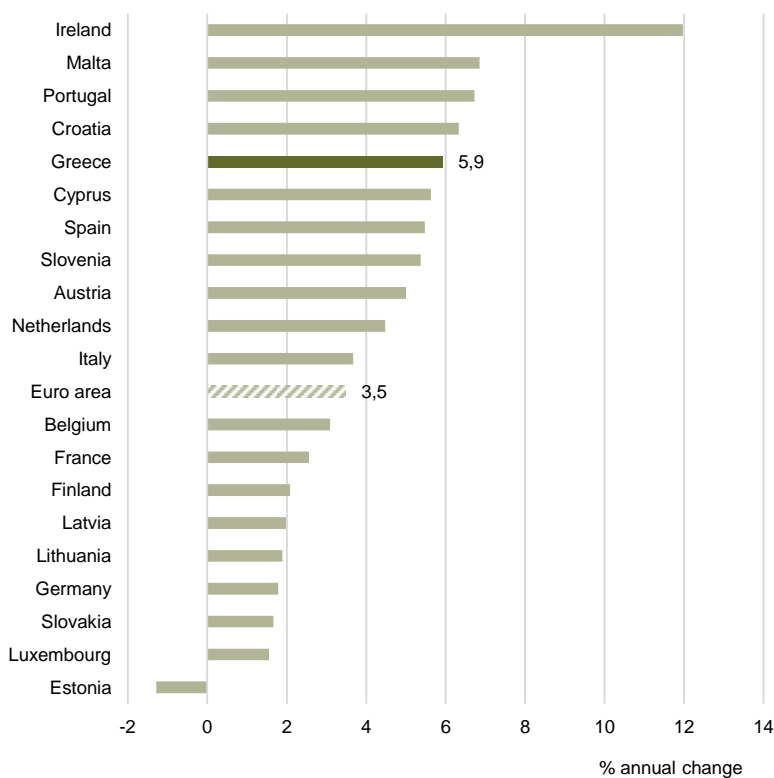
Source: IOBE.

In conclusion, the prospects for construction are, under certain conditions, positive. The expected rise in construction activity will strengthen the need for businesses and professionals in the sector for funding in the coming years. However, difficulties in financing and higher (compared to other euro area countries) borrowing costs for construction firms and professionals continue to impede. At the same time, Greece's financing gap is consistently higher than the European average. The difficulties in financing and the high financing gap may be alleviated by the use of various financial instruments (e.g. guarantee funds, interest rate subsidies, etc.) to reduce severe disruptions to business and investment levels and to seamlessly implement public and private investment in construction projects in the coming years.

# APPENDIX

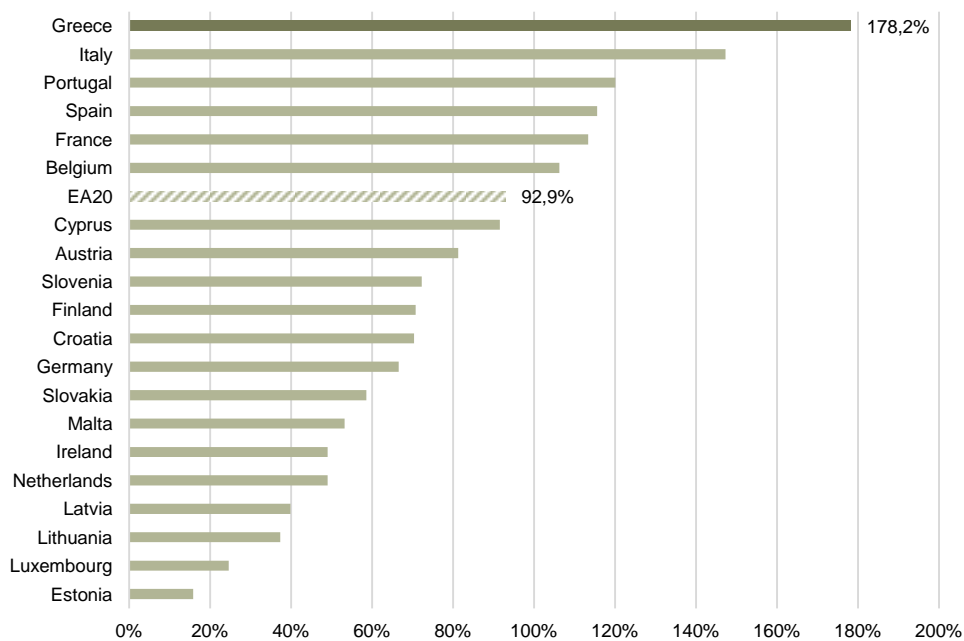
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**Figure 1**  
Real GDP growth rate, 2022



Source: Eurostat

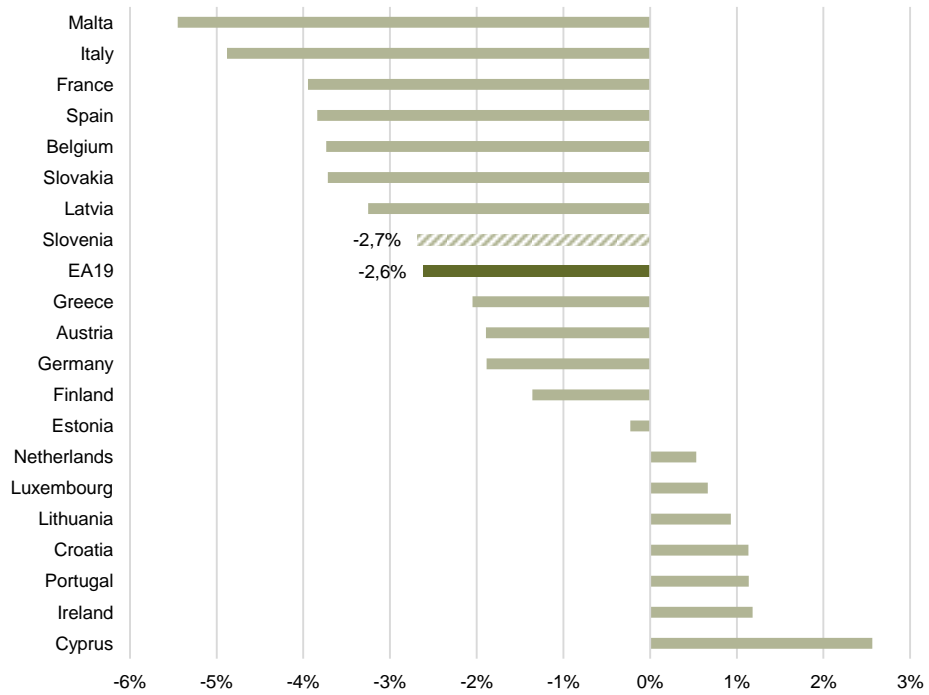
**Figure 2**  
General Government Debt as % of GDP, Q3 2022



Source: Eurostat

**Figure 3**

General government balance as % of GDP, Q3 2022 (\*)

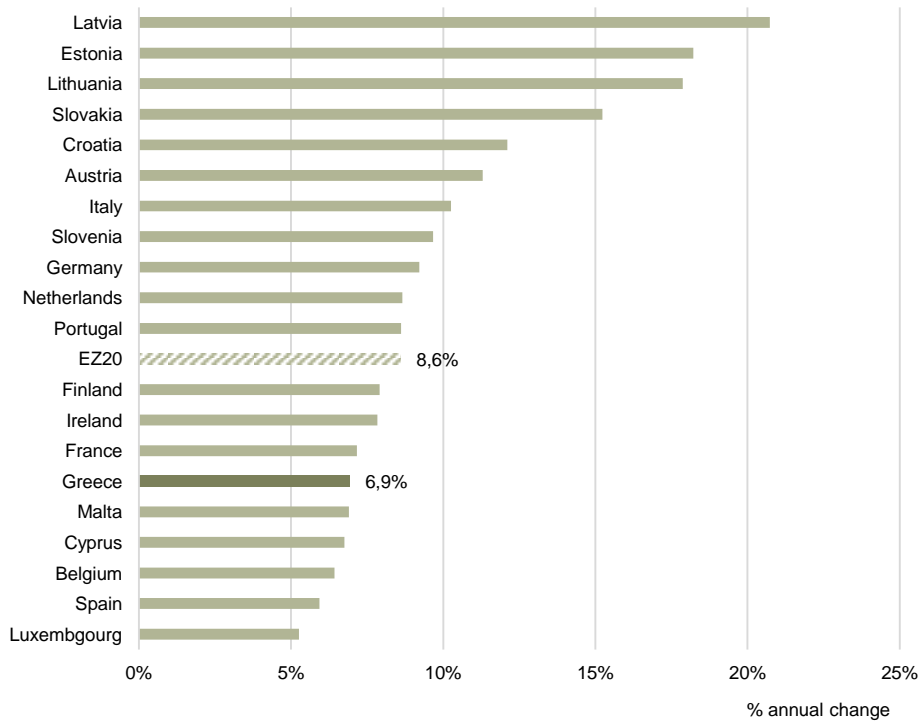


(\*) Annualised data (moving average of 4 quarters, up to and including Q3 2022)

Source: Eurostat

Figure 4

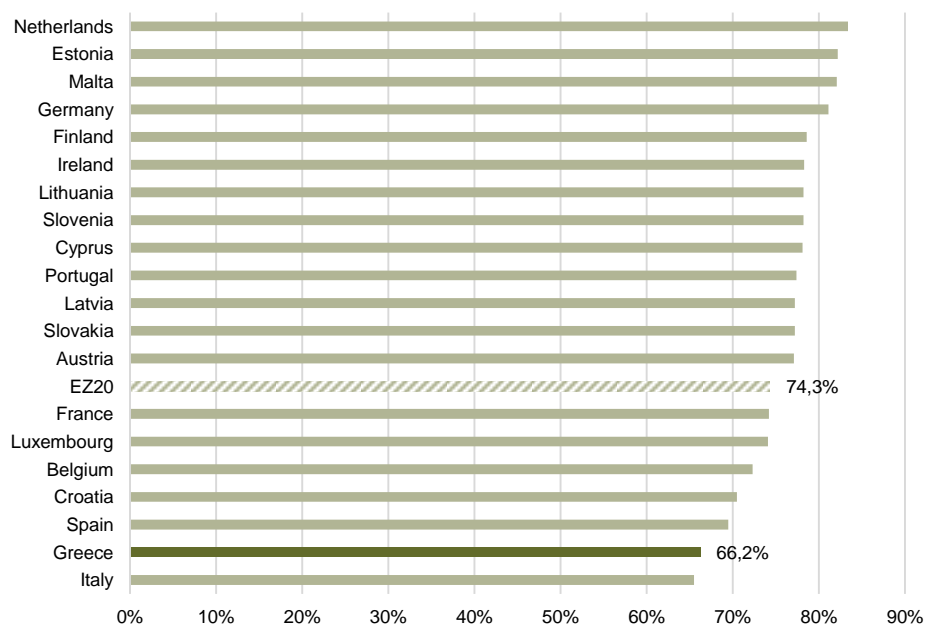
Harmonised Index of Consumer Prices, January – February 2023



Source: Eurostat

Figure 5

Employment, Q4 2022 (\*)

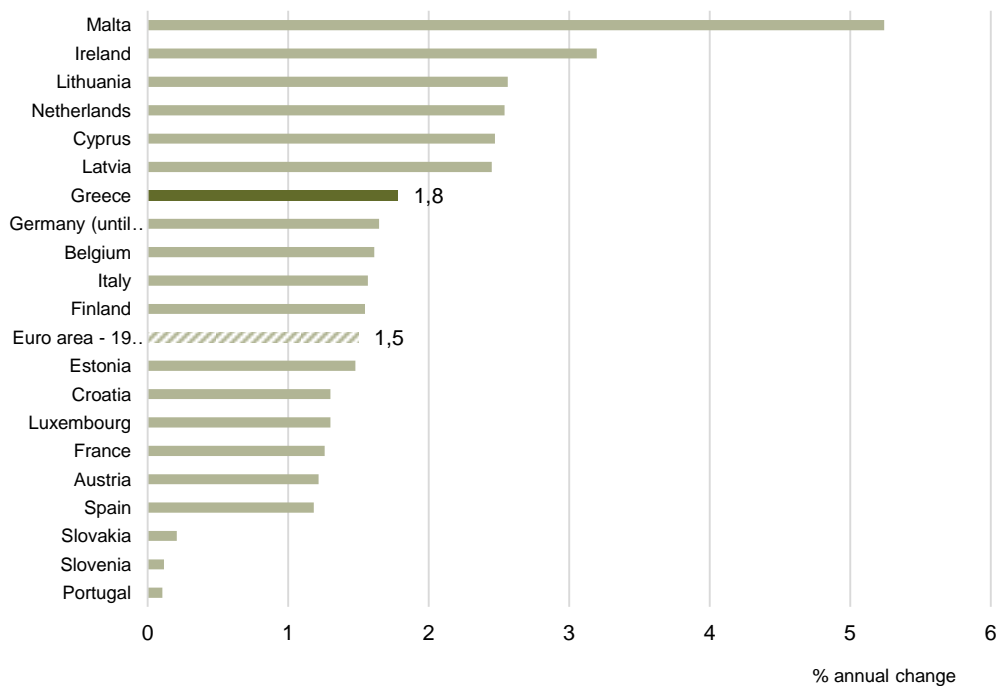


(\*) % of employed people aged between 20 and 64 in relation to their total population

Source: Eurostat

**Figure 6**

Change in Employment, Q4 2022 (\*)

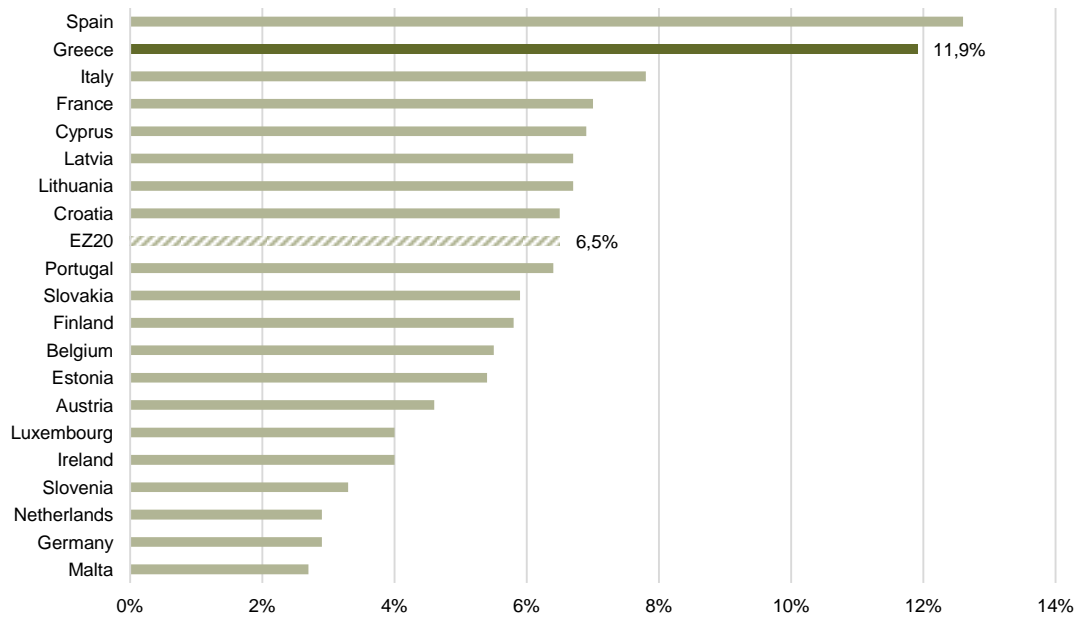


(\*) employed people aged between 20 and 64

Source: Eurostat



**Figure 7**  
Unemployment, Q4 2022 (\*)



(\*) % of unemployed aged 20-64 in the total active population of the corresponding age, seasonally adjusted data  
Source: Labour Force Survey, Eurostat